



# ( 4 2 2 : 3.9 > 89 & 3 ) & 7 ) 8 2 & 3 : & 1

## .LRPMBSARGML

ĽāYāŌŽā \ 'bAYāZANYbā^ā'ŸAUā | Žā'ā' b [DAŌ^āāNY@^āāUā | Žā'ā' b [Aāb@' | ŽāAb^Aa^ābŽ@AbāŽAa \ āāŽābAZŽ | Žā^~ & ŽābA^āa  
 'bāAāb \ ZZābāA'āAYāAYb & ^ā~āŽ@Zā^āYŸ@ZAYāZāY^āYŽ@āāEAbāŽAŌŽā \ 'bA | Yā \ Žā^āAÉIIEAIEÍIHGEÉIÁAbāŽAYŸ@Zā^āa  
 ŽYŸāYāZāŽ | Ž@ [A'āZ' | 'Z\YāDAYā^āāA { 'bāAbāŽAUā | Žā'ā' b [ 'āA & 'āā^āAb^ā' āā~ '@Zā'āZ' | 'Z\YāāAb^āZ} YŽā'āā  
 āŽY@ā'āāDAāŽYZZ@āā~DAYāZāāŽ@ | 'YŽAYŸāā \ āAb^ā~@^ & ^bZābāŽāā@^ { bāAYāZAZŽ | Žā^~ & ŽābA^āAbāŽā { ā^āŽā~Žā^āāEā  
 Pā'āā'āAYāā^AY@b'Ÿ\āYbZZā'āAbāŽAUā | Žā'ā' b [ 'āY^@Zā | Yā \ ŽāAbāYbYŸāāAa^@AbāŽAY@ŽYb'āā^āaYā@'ā^@^āAY~@^YŸā  
 b^āA'āYā^āY@āā~DAYāā'āYā\ā' | ŽAY^& & \ā' b [A { āŽ@Zā'āāZ@'āā^~^ābā^āa | Ž { AYāZāZ}~Ž@'ŽāYŽAY@Zā | Yā \ ZZDAYA  
 Ÿ^& & b & ŽābAb^āāY@'āā^@Aā'abāDAYāZAYāAY~@ŽY'Yb'^āAbāYbA^@A~Žā^āYāYāZAY^āāŽYb' | ŽAYā^YŽāYŸā  
 Ÿ \ 'āZAYā & ^@Zāā \ ābA { ^@āZÉAR \ @AY^& & \ā' b [A^āZāā'āāZ}~ŽYbYb'^āā^āāā { A { Žāā' | ŽAYāZā'ābZ@YŸbA { 'bāZŸYāA  
 ^bāŽ@AYāA { ŽAY@ZAYāā'ābZ@Y^āāŽYbZZAYāZAbā \ āAbāŽAYŸb'^āā^āā^āZā^āA \ āAāYāYāZāāZŸbā^āA \ āAY^āāŽYb' | Žā [EA  
 ŠŽā~ŽYbAa^@AāZāāDA@Žā~ŽYbAa^@A^āāZ@āDA@Žā~ŽYbAa^@A~@^~Ž@b [DA@Zā~ŽYbAa^@AY \ bā^@'b [DAYāZāā^āZāb [DAY^bāA  
 { 'bā'āAYāZā^ \ bā'ZZābāŽAUā | Žā'ā' b [AY^& & \ā' b [AY@ZābāŽā^ \ āZŸb'^āāAa^@A^ \ @AbYāZŸ@Zā^āY^āZ \ ŸbÉAŌā  
 ^@ZZ@Aa^@A^ \ @AY^& & \ā' b [Ab^Abā@' | ZDAYāā&Ž&ŸZāā & \ābAYZAYŸb' | Žā'āY^āb@'Ÿ \ b'āāAb^AYāZā | @^ā & ŽābA { āŽ@Zā  
 ~Žā~āŽāŽāYāZāā \ ābYāZZDAŽāYāZZDAYāYāāZāāZZDAYāZAY~@ŽY'YbZZÉU Žā & \ābAYāā^āāZā^ \ @āZ' | ŽāAYāZā  
 ŽYŸā^bāZ@AYŸŸ^ \ ābYŸāZā^@A^ \ @AYŸb'^āāAYāYA~Y@bA^āA^ \ @AY^& & \ā' b [Aā'āZÉ

## .I 89 : ) \* 39 ( 43 ) : ( 9 8 > 89 \* 2

### 89 : ) \* 39 ( 4 ) \* 4 + ( 43 ) : ( 9

Tb \ ZZābāA Žā^āā'āā'āā Ō^āā NY@^āāUā | Žā'ā' b [A Yāā \ & ŽAYāA ^Yā'āYb'^āA b^A YŽāY | Žā'ā' YA & YāāZ@A  
 Ÿ^& ~Yb'ŸāZā { 'bāA bāZā Uā | Žā'ā' b [ 'āA a \ āYb'^āA YāA YāA ŽZ \ ŸYb'^āYāā'āāb' b \ 'āāEā PāZā ~ \ @~^āZā ^āa bāZā  
 Tb \ ZZābA N^āZā ^āa N^āZ \ ŸbDA āZ@Z'āA @ZāŽ@ŽZā b^A YāA bāZā Tb \ ZZābA N^āZDA 'āa b^A ŽābYŸā'āāA bāZā  
 Ž}~ŽYbYb'^āāA@ZāY@Z'āāAāb \ ZZābā^AYŽāY | ^@DAYāZAb^āZ}~YāZā \ ~^āAbāŽā@'āābAYāZā@Zā~^āā'Ÿ'ā' b Žāā  
 ^āAāb \ ZZābāEāPāZāZāā \ 'ZZā'āZāAY@Zā^ābAY@Ÿ' b@Y@ [AāZā'āāYb'^āāY \ bāāY | ŽDAYābāZ@A~@' & Y@ [A~ \ @~^āZDA  
 bāZā { ŽāAY@Zā ^āa āb \ ZZābāAYāZābāZā Žāb'@ZāŌ^āā NY@^āāY^& & \ā' b [ÉA PāZ [AāY | ŽāYZZāAa^@ & \āYbZZā  
 { 'bāA bāZā ^YāZŸb' | Žā'ā' Z@ŽYb'^āāAYāZāYāāZā'āābāZā Žāā^@bāA ^āa Ō^āā NY@^āā āb \ ZZābāA b^ { Y@ZAYā  
 ā \ ŸYŽāāā \ ā \ ā' | Žā'ā' b [Aā'āZÉ

PāZāUā | Žā'ā' b [A'āAZZŸ'ŸYbZZā^āb^āā [Ab^AāZŸ@ā'āāYāZAbāŽAYZ | YāŸŽ & ŽābA^Aaæā^ { āZZāZDAY \ bAYāā^A  
 b^AbāŽā { ā^āZāZŽ | Žā^~ & ŽābA^āA~Žā^ā'āā { 'bā'āAbāŽANYbā^ā'ŸAYāZāŌŽā \ 'bAb@YZ' b'^āāEāPāZāUā | Žā'ā' b [A  
 ^āAāb \ ZZā ā°B ā^b^ { ^



fi 1?AI MD 7CQNCAR DMP 5PMNCPRW

YÉA OááYá'ááA'ábáŽĀ\áY\ bá^@']ŽZĀŽáb@ [A'áb^DA\āŽĀ^aDA^@A^ŸŸ\~YaŸ [A^aA
Uá|Žā'b [A~@Ž& āžĀĕ
YÉA OááYá'ááA'ábáŽĀYbbŽ&~bŽZ^A^AYŸb\YáAbāŽabA^aDA&'á\āŽĀ^aDAZY&YáŽAb^DA^@A
ZŽāb@ \Ÿb'^áA^aA'āāb'b\ b'^áYāDAá@^ \~DA^@A~@ |YbŽĀ~@^~Ž@b [DA'áŸá\Z'ááAá'Ÿ@Y@ [A
&YbŽ@YāāDAŸ^&~\bŽ@āDA^@AŸ^&~\bŽ@']ŽZĀ'áa^@&Yb'^áĒ
YÉA OááYá'ááA'áAY@ā^āA^@AbāŽĀ'@Žā~^āā'ŸZĀ\āŽĀ^aA@'ŽĒ
ZÉA S^āāžāā'ááA~@^~Ž@b [AbāYbA'āAā^bA [^\@A^ {āDAā\ŸāAYāA@^&AæŽ [āA^@A
Uá|Žā'b [A'ZŽāb'a'ŸYb'^áĒĒ

ži 1?AI MD 7CQNCAR DMP &SRFMPGRW

YÉA ÓābŽ@aŽ@'ááA'ábŽāb'^áYāā [A { 'bāAYá [Aā^@ & YāAa\āŸb'^āA^aAYAUá |Žā'b [A
ā~^āā^@ŽZAYŸb'|b [DA^āA^@A^aaAYŸ &~\āĒ
YÉA Ú'^áYb'ááA~\Ÿ'áāŽZĀ~^á'Ÿ'žāAYáZĒ^@A@ \āžāAá^|Ž@'ááA@Žā'ZŽāŸŽĀAYāāāDA
āb\ZŽābA^@áYá']Yb'^āāDA^@AbāŽĀUá'|Žā'b [É
YÉA OááYá'ááA'áā'āZáYāAY&Yá'ááĒ
ZÉA ŒEY'á'ááAb^AY^&~ā [A { 'bāAZ'@ŽŸb'^āāA^aAUá |Žā'b [AŽ&~ā^ [ŽŽāAYŸb'ááA'āAbāŽĀ
~Ž@a^@ &YāŸZĀ^aAbāŽ@AZ\ b'ŽĒĒPā'āA'āŸā\ZŽāDAY\ bA'āAā^bAá' &'bZZAb^DAÓNUSŃA
~Ž@ā^āāžāDAŠžā'ZŽāŸŽĀŌ'aŽāAbYaaDAYāZĀÓNUNĀ'á'ááAbYaaĒ
ŽÉA OááYá'ááA'áAYŸbāA^@AZŽŽāAbāYbA |'^áYbŽĀŽ} 'āb'ááAaŽŽŽ@YāDAābYbŽDAŸ^\āb [DA^@A
&\āŸ~YāAaY { āA^@A^@Z'áYāŸŽāĒ
āÉA Šžā\ā'ááAb^Aāā^ { A^@Aā \@@žāŽŽ@AUá |Žā'b [A'ZŽāb'a'ŸYb'^āA\~^āA@Ž\* \žābAY [A
Uá|Žā'b [AŽ&~ā^ [ŽŽāAYŸb'ááA'āAbāŽĀ~Ž@a^@ &YāŸZĀ^aAbāŽ@AZ\ b'ŽĒĒ
áÉA ŒEY'á'ááAb^AY~žY@AYŽā^@ŽAbāŽĀŃžYāA^aTb\ZŽābāA^@AZžā'áāžžĒ
āÉA ŒEY'á'ááAb^AY^~žYbŽĀ { 'bāAYá [ATb\ZŽābAN^áZ\ŸbAŁZ &'á'ābYb^@EM^Y@ZAY [A
ā^bAYŽ'ááAa^@bāŸ^&'ááAYāZĀā^āžābA { 'bāA'āa^@ &Yb'^áĒ
ÉA ŒEY'á'ááAb^AY^&~ā [A { 'bāAZ'āŸ~ā'āY@ [AYŸb'^āāA' &~^āžZĀ'áAYAb' &žā [A &YāāžžĒ
āÉA Ú'^áYb'ááAYA~@'ābŽZĀ~^á'Ÿ [A'āā\žžAY [AŁŸYZŽ &'ŸAŁaaY'@āi

ži ) 6QFMLCQRW

YÉA OááYá'ááA'áAYá [Aa^@ & A^aAZ'āā^āžāb [DA'áŸá\Z'ááAYŸYZŽ &'ŸAZ'āā^āžāb [ÉA
ĀTŽžAŁŸYZŽ &'ŸAŌ^āžāb [AS^á'Ÿ [A
ābb~ĪĒā' bžāĒāŸ\Ēžž\Ēžžā^āāb\ZžābāĒ~YāžāĒŸ^&&\ā'b [ÉA
ābYāZY@ZāŸYŸYZŽ & ŸĒā^āžāb [ÉA
YÉA Œ\@ā'āā'ááAaYāāŽĀ'Zžāb'a'ŸYb'^āAb^AbāŽĀUá |Žā'b [Aæā^ { 'ááá [É
P'ā@ž~@žāžāb'ááA'āa^@ &Yb'^āAYŸ^\bA^āžāžāA^@A^bāžāā { āžāA~@^ |Z'ááA
'āa^@ &Yb'^āAb^AYAUá |Žā'b [A^aa'Ÿ'YāAYŸb'ááA'āAbāŽĀ~Ž@a^@ &YāŸZĀ^aAā'āĒāžžĒ
Z\ b'žāĒĒ
YÉA OááYá'ááA'āAa^@áž@ [DAYābž@Yb'^āDA^@AbāŽĀ\áY\ bá^@']ŽZĀ\āŽĀ^aAUá |Žā'b [A
@žŸ^@ZāDAZ^Ÿ\ &žābāDA^@A'āāb@\ &žābāA^aA'Zžāb'a'ŸYb'^áĒĒ
ZÉA P'ā\ā'ááAa'áYāŸ'YāAYāā'ābYāŸžĀŸZBāā@^\āāAa@Y\ZAYáZĒ^@AYŸ\āžĒ

pāžAYŸ^|žāž}Y&~žāAY@žā'āā\ābYb'|žā@Ybāž@AbāYāAž}āY\āb'|žĒAŌāAbāžāž|žābAbāYbAbāž@žAY@'āžāA
ā^&žAY&Ÿ'á'b [DA'áŸáāā'ābžāŸ [A^@AžžžAa^@AYāY@a'ŸYb'^āA'āAbā'āAābYbž &žābDAā\ŸāZžā'ā'b'^āDA
'ābž@~@žYb'^āA^@AYāY@a'ŸYb'^āAāāYāāŸZžž'ZžžAY [AbāžĀŃžYāA^aTb\ZžābāĒ

Tb\ZžābāAāā^\āZAY^āā\ābAbāžĀUážž@á@YZ\YbžĒŌ@YZ\YbžAM\āāžb'āāDAbāžĀN^&&\ā'b [ATbYāZY@ZāA
PYā\YāDAbāžĀŠžā'ZžāŸžĀŌ'āžāA^\ā'ááAY^āb@YŸbDAbāžĀŌ&&žā'āAYāZATb\Z [AŁŸ^AYZĀŁá@žž &žābāDA
YāZĀ^bāž@A~\Ÿ'áāžžĀUá |Žā'b [A~^á'Ÿ'žāAa^@AYA &^@žĀŸ^&~āžžā'ābA^aAž}~žŸYb'^āāAYāZA
@žā\āYb'^āāĒ





bā^āZāāb\ZZābā { ā^AY@Z@Z\* \ '@ZZAb^Aā' | ŽA'āAbāZ@Zā'ZZāYŽAāYāāAa^@AbāZāAa^āā { 'āāA [ŽY@A  
{ 'āāAYŽAYāā' āāZZAb^AYa@^^&AY [AbāZARaa'YŽA^aŠZā'ZZāYŽAŌ'aŽAYabZ@AYāābāZ@A@Zb \ @ā'āā  
āb\ZZābāAāY | ŽAbāZā^~^@b \ ā'b [Ab^Aā'āāA \ ~ÉA Ū @'bbZāAā^b'a'Yyb'^āA^Abā'āAYyb'^āA & Y [AYŽA  
~@^ | 'ZZZAb^Aā'āēāZ@~Y@ZābĀāBÉā \ Y@Z'YāĀāBA'aAbāZāāb\ZZābā'āAYAZZ~ŽāZābÉ

**01 ) CDCPPCB 8SQNCLQGML**

ŇŽāZ@ZZAT \ ā~Žāā'^āA'āAa^@AYaā~ŽY'a'Yā~Z@'^Z^A^Ab' & ŽAYāZA'āAYaA^@&YāAā^b'YŽAb^AbāZā  
āb\ZZābAbāYbAbāZAYyb | 'b [A'āA\* \ Žāb'^āA'āA \ āYŸYŽ~bYŸāZAYāZA | Ž@ [AāZ@'^ \ āÉAT \ ā~Žāā'^āA  
{ 'āāA@Z & Y'āAZZāZ@ZZA \ āiZāāZ'āY'~ā'āY@ [AYyb'^āāAYāā'āāZZAY@Zā^bAY^&~āZbZZAYāZÉ^@A  
\āiZāāY^āb'ā\ZZA'āY~@^~@'YbZAYŽāY | '^@Aa^āā { āÉAŁZZ'b'^āYāA | '^āYb'^āāA^AbāZāATb\ZZābA  
N^ZZA { 'āāA & ^ābAā'āēZā [A@Zā \ ābA'āAā \ ā~Žāā'^āA^@AZ} ~ \ āā'^āAa@^&AbāZāUā' | Ž@ā'b [ÉAŌāAYZZ'b'^ā  
b^Aā^ \ ā'āā@Zāb@'Yb'^āāA^bZā \ āZZ@AUā | Ž@ā'b [A~@^Yyb'^āDAāb\ZZābā { ā^āY | ŽAYŽZā  
~āYŸZā^āNŽāZ@ZZAT \ ā~Žāā'^āAa^@AYa~Z@'^Z^A^A & ^@ZAbāYāÉGAŸ^āāZŸ \ b' | ŽA { ŽZāā { 'āāA  
ā^bAYŽA~Z@ & 'bbZZAb^A@Zā'ZZā'āMŽ@āZbAŌYāāA^@AYā [A^aaAYY & ~ \ āA~@^~Z@b'ZāAYZ & 'ā'ābZ@ZZA  
Y [AbāZARaa'YŽA^aŠZā'ZZāYŽAŌ'aŽAa^@AbāZāAa^āā { 'āāA [ŽY@EAŠ'ā'āāŌ \ ā'^@āAYāZATZā'^@āA  
{ Yāb'āāAb^Aā' | ŽA^āAYY & ~ \ āA { 'āāAYZ@Z\* \ '@ZZAb^A & ŽZbA { 'bāAbāZāN'@ZŸb^@A^aAŠZā'ZZāYŽAŌ'aŽA  
a^@AYa^āZÉ^āÉ^āZ@Z | Ž { A^aAā'āēāZ@AY^āZ \ YbAa'āZÉA Ū @'bbZāAā^b'a'Yyb'^āA^Abā'āAYyb'^āA & Y [A  
YŽA~@^ | 'ZZZAb^Aā'āēāZ@~Y@ZābĀāBÉā \ Y@Z'YāĀāBA'aAbāZāāb\ZZābā'āAYAZZāā'





ĀĒĒBĀŸ\ ā'āžāāZY[āĒĀŌāĀŸYāžāā^āāž@'^\āā&'āŸ^āz\ŸbDAbāžĀUā'|ž@ā'b[A@žāž@|žāAbāžĀ@'áābA  
b^ĀŸŸbA^āā@ž~^@bāāā^A&Ybbž@A{āžāAbāž[AŸ@žāā\Ÿ&'bbžžĒĀpāžĀUā'|ž@ā'b[A{āā'ā|žāb'áYbžA  
Yāā@ž~^@bāĒ

ŌāĀŸYāžāA{āž@žAbāž@žA&Y[AŸžĀYA{bāžāāAb^ĀYāĀYāāžāžA|^āYb^āDA^@A'āĀŸYāžāA{āž@žĀYA  
āb\žžābA{ā^ĀŸžā'ž|žāāĒāžāYāĀŸžāAbāžĀ@žŸ~žābA^āYā^bāž@Aāb\žžāb'āā&'āŸ^āz\ŸbA  
@ž^\* \žābāAbāYbAbāžĀUā'|ž@ā'b[A~\@ā\žAbāžĀŸYāžāž|žāAbā^ \ áāāĒāžĀ'āA\ā{āā'āāAb^Aa\@bāž@A

( I &BKGLGQRP?RGTc - C?PGL

Ł áAYZ& 'á'áb@Yb' | ŽááŽY@ 'ááA'áAYAa^@ & YáááŽY@ 'ááAY'áZ\ŸbŽZAY [A^áŽAĀ^@Ab { ^BATb\ZZába

ÉÉÁ pāŽĀ^@áYá' ]Yb'^á'āAYZ| 'ā^@A'āA'ā | b'ZZAb^AYbbŽāZAbāŽAāŽY@'āáÉ

ĐÉÁ pāŽĀ^@áYá' ]Yb'^á'āA~@Žā'ZZābAYáZāŽ} ŽŸ\ b' | ŽĀ^aa'ŸŽ@āA { 'āāA \ ā \ Yāā [ A^aa'Ÿ'Yāā [ A  
@Ž~@ŽāŽābAbāŽĀ^@áYá' ]Yb'^á'āAYbAbāŽAāŽY@'āáDAYābā^ \ āāAYZZ' b'^āYāA^aa'ŸŽ@āAYáZĒ^@A  
& Ž&ŸŽ@āA^aAbāŽĀ^@áYá' ]Yb'^á'ā&Y[AŸŽĀ'ā | b'ZZAb^AbāŽAāŽY@'āáÉ

€ÉÁ pāŽĀ^@áYá' ]Yb'^āA { 'āāYŸAYāāŽZAb^Aā \ Ÿ & 'bAYA { @'bbŽāAābYbŽ&ŽābAYŸ^ \ bAbāŽĀ  
'āŸ'ZZābAYáZĀ' bāA&Ž&ŸŽ@ā'ā | ^à | Ž&ŽābAbāYbA { 'āāYŸĀ \ āŽZAZ \ @'āāAbāŽĀāŽY@'āáÉA  
RbāŽ@ { 'āŽDAbāŽĀ^@áYá' ]Yb'^āYāAāŽY@'āáA { 'āāA^āā^ { AbāŽĀ~@ŸŸZ \ @ŽāA \ bā'āŽZĀ'āA  
TŽŸb'^āA000DAŌÉ

**, I 8RSBCLR (MLBSAR - C?PǪLE 5PMACBSPCQ**

pā'āAāŽŸb'^āAZŽāŸ@ŸŸāAbāŽĀ^@&Yb^aAbāŽĀāŽY@'āáAYāZAbāŽĀ@'āābā^aAbāŽĀ@Žā~^āZZābA'āAYA  
āŽY@'āáA~@ŸŸāāŌbAYāā^A'āŸā \ ŽZā'āa^@&Yb'^āAYŸ^ \ bA { 'bāŽāāŽāDAYZ| 'ā^@āDAbāŽĀZZŸŸ'ā'^āÉ  
&YāāāA~@ŸŸāāDAYāZAbāŽĀŸ^&& \ ā'ŸYb'^āA~@ŸŸāāÉ

**flI - C?PǪLE +MPK?R**

YÉA ŁAā'āāŽĀ@ŽŸ^@ZĀŸ^āā'āb'āāA^aA { @'bbŽāAā^bŽāDA^@A^bāŽ@A&Žbā^ZāAāŽāŽŸbŽZĀ  
Ÿ [ AbāŽĀTb \ ŽZābAN^āZ \ ŸbAŁZ & 'ā'āb@Yb^@A { 'āāYŸĀ & YZZĀ^aAYāāāŽY@'āáāÉA  
pā'āA@ŽŸ^@ZA { 'āāYŸĀ@ŽbY'āŽZĀa^@A^āŽĀ & ^ābāA^āā^ { ' ŽŸ^@Ÿ ' āDAYáZAYā

áÉÁ Ł äáA~@^ŸŽŽ\|@YáA\* \Žáb^ááAY@ŽAā \YáŽŸbAb^AbāŽAá^áYāZZŸ^á^áA^aAbāŽATb \ZZābA  
N^āZ \ŸbAŁZ& á^áb@Yb^@É

ŁI 8RSBCLR 7GEFRQ

ŌāAbāŽAāŽY@'ááAā^b^a^ŸYb^'āAāŽbŽ@AYāZAYáY^áAYbAbāŽAYŽá^áá^áA^aAbāŽAāŽY@'ááDAbāŽA  
@Žā~^āZZābA { 'āAYŽAYZ| 'āZZAbāYbAāÉāŽAāYāAbāŽA@'áábāAā'ābZZAYŽā^ { ÉATb \ZZābāA  
{ 'bāAYá [A\* \Žáb^'āāAYŸ^ \bAbāŽ^@A@'áábāAY@ŽAāŸ^ \@YáŽŽbAb^AY^ābYŸbAbāŽAŁāā^ŸYbŽA  
NŽYāA^aATb \ZZābāÉ

- YÉA pāŽAāb \ZZābA^āAŽāb^bāZZAb^AYŽA^ | ŽāAYāAŽ} ~āYāYb^'āA^aAbāŽAāŽY^āZ \ŸbA  
ā [ābŽ&AYāZAYāY@áŽāBÉ
- YÉA pāŽAāb \ZZābA^āAŽāb^bāZZAb^Aa@ŽZZ^&Aa@^&AāY@Yāā&Žāb^@A@ŽbYā^Yb^'āAY [A  
^bāŽ@āA^ā | ^ā | ŽZA^'āAbāŽAā^b \Yb^'āÉ
- YÉA pāŽAāb \ZZābA^āAŽāb^bāZZAb^AbāŽA \āŽA^aAYāAY | Y^'āYŸāŽA^ābŽ@āYāYāZ} bŽ@āYāA  
ā \~^@bāāŽ@ | ŸŽā^'āAZŽY^'ááA { 'bāAbāŽAYabŽ@ & YbāA^aAbāŽA^'āY^ZZāBÉ
- ZÉA pāŽAāb \ZZābA^āAŽāb^bāZZAb^A^AYāŽŸbAb^AYa&Ž&ŸŽ@A^aAYATb \ZZābAN^āZ \ŸbA  
M^Y@ZA^@A@ŽYā^āāA^aA^aa^Ÿ^YāA^@A~Ž@ā^āYāY^āāā^ŸbA^a^'ābŽ@ŽāBÉ
- ŽÉA pāŽAāb \ZZābA^āAŽāb^bāZZAb^AbāŽA~@ŽāŽāŸŽA^aAYāAYZ| 'ā^@A^aA^āÉāŽ@A  
Ÿ^'ā^'ā^'āáÉ
- aÉA pāŽAāb \ZZābA^āAŽāb^bāZZAb^AYŽA~@ŽāŽābAbā^ \^'áá^ \bAbāŽAāŽY@'ááY^ \bA^bA  
Z \@'ááAbāŽAZŽā^ŸŽ@Yb^'āāA^aAbāŽATb \ZZābAN^āZ \ŸbAŁZ& 'á^'āb@Yb^@ÉM^Y@ŽÉ
- áÉA pāŽAāb \ZZābA^āAŽāb^bāZZAb^Aaēā^ { AYāāA^'āa^@ & Yb^'āA~@ŽāŽābZZAYáY^'āābA  
ā^&ÉāŽ@AYāZAb^A | Ž { A~Ž@b^'āŽābA&YbŽ@YāāAā \~^@b^'ááAbāŽAYāŽAYáY^'āābA  
ā^&ÉāŽ@É
- āÉA pāŽAāb \ZZābA^āAŽāb^bāZZAb^A~@ŽāŽābA~Ž@b^'āŽābA^'āa^@ & Yb^'āAYāZAbāŽA  
'āa^@ & Yb^'āA^aA { 'bāŽāāŽāAŽ} Ÿā \Z^'āáAYāY@ŸŸbŽ@A { 'bāŽāāŽāAb^A  
ā \ŸābYāb^YbŽAā^āÉāŽ@AYāZAYāZAb^A@Žā~^āZAb^AbāŽAYāY@áŽāYáY^'āābA  
ā^&ÉāŽ@ÉA pā^'ā^'ā \ZZāA~@^~^'ááA\* \Žáb^'āāAb^AYŽAYāæZZA^a^bāŽ@āA  
'ā | ^ā | ŽZA { 'bāAbāŽAŽ} ŸŽ~b^'āA^aAYZ| 'ā^@āÉ
- 'ÉA pāŽAāb \ZZābA^āAŽāb^bāZZAb^Aa@ŽZZ^&Aa@^&AāY| 'ááA^@@ŽāŽ | YābA~Ž@ā^'āYāA  
ā^'āb^@ [AZ^'āŸ \āāŽZA^AY^'āā^'āZ@ZZAZ \@'ááAbāŽAY^'āZ \ŸbA~@^ŸŽāāÉAāpāŽA  
Tb \ZZābAN^āZ \ŸbAŁZ& 'á^'āb@Yb^@A { 'āāZZbŽ@ & 'āŽA@ŽāŽ | YāŸŽÉB Y b^'ā ā \ŸābYāb

ŮāĀŸŸāžā'á | ^á | 'ááA & ^@žAbāŸā^āžāžā~^āžžābDAYATb \ žžābAN^āZ \ ŸbA  
ŁZ & 'á'āb@Ÿb^@A & Y [AZŽŸ ŽžAb^ĀŸ^āž \ ŸbAbāžāžŸ@'ááāāž~ŸYbžā [A^@ā^'ābā [É

Ůāž@žAb { ^A^@A & ^@žĀŸŸāžā'á | ^á | 'ááĀŸ^ & ^āĀŸŸ \ @žāŸžāA^@AbāžāŸY & žA  
āb \ žžābĀāBAYžA~žāž'ááā & \ ābŸāž^ \ āā [DAbāžATb \ žžābAN^āZ \ ŸbAŁZ & 'á'āb@Ÿb^@A  
& Y [AZŽŸ ŽžAb^ĀŸ^āž \ žŸbžAbāžāžŸ@'ááA^āā \ ŸāŸŸāžāDA^@āžŸ@Abāž & A  
āž~ŸYbžā [É

**žI < GRLCQQCQ**

pāžA@žā~^āžžābā'āA@žā~^āā ŸāžAa^@AY@Ÿāá'ááAa^@A { 'bāžāāžāŸY~žŸ@'ááA^āA  
ā'āÉāžAŸŸāŸāŸbAbāžāžŸ@'ááÉATb \ žžābāA { ā^ĀŸžā'ž | žAbāž [AĀŸ | žĀŸžāAbāžA  
@žŸ'~žābA^@Abāžāžā~^āžžāb'āA & 'āŸ^āž \ ŸbDAYāžAbāžATb \ žžābAN^āZ \ ŸbA  
ŁZ & 'á'āb@Ÿb^@A & Y [AYāā'ā | 'bžA { 'bāžāāžāAb^ĀŸ~žŸ@AYbAbāžāžŸ@'ááÉĀŮābāžā  
žŸž~b'āŸāŸ | žābAbāŸbAYā { 'bāžāā'āA \ āŸŸāžAb^ĀŸbbžāžAbāžāžŸ@'ááDAbāžā { 'bāžāā  
& Y [A { @'bžA^@A@žŸ^@ZAYābŸž & žābAYāZāž'āŸ \ āāAbāžābŸž & žābA { 'bābāžATb \ žžābA  
N^āZ \ ŸbAŁZ & 'á'āb@Ÿb^@AYžā^@žābāžāŸāžž \ āžžāžŸ@'ááÉpāžATb \ žžābAN^āZ \ ŸbA  
ŁZ & 'á'āb@Ÿb^@A'āAb^ĀŸžā^b'āžžābāžāābāŸāŸā^āžāĀÉBAY \ ā'āžāāZY [ĀŸžā^@žAbāžA  
āžŸ@'ááDA^@Abāžā~žāžāā'ābžāž'āāAb^@^ | žžā'āa^@ & Ÿb^@āDA { āžbāž@'āA~žāā^ā  
^@A'āA { @'b'āāÉpāžATb \ žžābAN^āZ \ ŸbAŁZ & 'á'āb@Ÿb^@A & Y [A@žŸā^āŸŸā [Ā' & 'bābāžā  
āŸ^~žĀŸāžAb' & žĀžž | ^bžžAb^A { 'bāžāābŸbž & žābāÉ Ů' bāžāāžāŸY@žAb [~ŸŸāā [AYāēžžA  
b^ĀŸ^ & & žābA^āā [A^āAbāžāž | žābābA~žb'āžābAb^AbāžāŸāŸ^āžāDAā^AbāžāŸāŸYŸbž@A^ā  
bāžā~žāāÉ

**žI .LDMPK?RGML**

ŮāAYāāŸŸāžāžAbāžā~^ĀŸžž \ @žāA { 'āāA^bAYžā \ ŸāžŸbAb^Āā' & 'b'āāA \ āžāA^ā'āa^@ & Ÿb^āÉA  
Ůāa^@ & Ÿb^āA { 'āāŸ^āā'ābA^ā^@ŸāŸāžA { @'bbžāŸŸŸ^ \ ābāDA'āŸžžāb@ž~^@bDAYāZAYā [A  
^bāž@A & Ÿbž@'ŸāZ'@žŸbā [A@žāŸbžžAb^Abāžā'āŸžžābÉRbāžž@A'āa^@ & Ÿb^āA & Y [AYāā^ĀŸžA  
Ÿ^āāžž@žžAYāžA { 'āāŸ^āā'ābA^āā \ Ÿābā'āāāŸāāžŸ^āžāŸāžāž~^@bāŸāžA  
Ÿ^Ÿ \ & ābŸāb'Ÿā'āa^@ & Ÿb^āāÉpāžATb \ žžābAN^āZ \ ŸbAŁZ & 'á'āb@Ÿb^@EM^Y@ZA  
NāŸ~žāā^āA & Y [A@žŸā^āŸŸā [Ā' & 'bābāžāŸāŸ^~žāA^ā'āa^@ & Ÿb^āāŸ^āāžž@žžA'āAbāžā  
āžŸ@'ááÉ

ŮāAZ \ @'ááAbāžāŸ^ \ @žāA^AbāžāžŸ@'ááAbāžAŸŸbāŸŸŸY@A^ \ bAbāŸbAbāžāžā~^āžžābA  
āb \ žžābA'āA@žā~^āā ŸāžAa^@AYā [A^bāž@A | ^āŸb^āāBAbAbāžATb \ žžābAN^āžžDA'ā'Abāžā  
@žā~^āā Ÿ'ā'b [A^AbāžATb \ žžābAN^āZ \ ŸbAŁZ & 'á'āb@Ÿb^@EM^Y@ZAb^A & ŸāžĀŸAY  
žžbž@ & 'āŸb^āA^@žā~^āā Ÿ'ā'b [A^@A@žŸ^ & & žāžAbāžā'āž'āāāŸāžAYāā'āāA^@A  
@žŸ^ & & žāžAbāžāž'āŸ'~ā'āŸ@ [AYŸb^āDAYāŸY~@^@~@ŸbžDAa^@ā \ Ÿā | ^āŸb^āāÉ

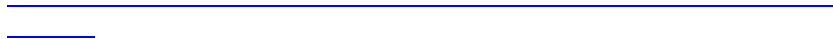
**žI & BTGQMPQ**

pāžA@žā~^āžžābAYāZAYāb \ žžābA { ā^ĀŸžā'ž | žāāāžāžāŸāŸŸžāAbāžāžŸ'~žābA^āA  
bāžA@žā~^āžžāb'āA & 'āŸ^āž \ ŸbA & Y [ĀāŸ | žĀ^āžAYZ | 'ā^@A^@Abāž'@ĀŸ^ā^'āāA~žāžābA  
ŸbAbāžāžŸ@'ááÉĀŮābāžāāb \ žžābA { ŸābābA^āŸ | žĀŸāŸYZ | 'ā^@A~@žāžābDAbāžāāb \ žžābA  
& \ ābāā^b'ā [AbāžATb \ žžābAN^āZ \ ŸbAŁZ & 'á'āb@Ÿb^@A^@Abā'āAŸŸbA'āA { @'b'āāA^āŸŸbž@A  
bāŸāAb { ^āāÉBAY \ ā'āžāāZY [āŸŸā^@žābāžāžŸ@'ááÉpāžAYZ | 'ā^@A'ā'ābžāžžAb^ĀŸžA  
^āAZ'@žŸbAYāā'ābŸāŸžAb^Abāžāāb \ žžābAYžā^@žDAZ \ @'āāDAYāZAYābž@AbāžāžŸŸ@'áāŸāžA  
bāž@žā^@žāāŸāŸŸā'ā | 'bžžAb^ĀŸbbžāžAbāžāžāb'@žā~^@b'āA^@AbāžāžŸŸ@'áāŸbA { ā'ŸāA  
'āa^@ & Ÿb^āA'āA@žŸž | žžāžžŸŸā \ ž'āāAZžā'Ÿž@Ÿb^āāBÉpāžāAb \ žžābā'ā | ^á | žžAY@žā  
@žā~^āā ŸāžAa^@A~@žāžāb'āābāž'@A^ { ā'āa^@ & Ÿb^āDAYāā { ž'āāA \* \ žāb^āāŸāēžžA  
ŸāžA~@žāžāb'āāA \* \ žāb^āāÉpāžāž'@A^@žDAYZ | 'ā^@āŸŸāžābA~ž@ & 'bžžAb^āā~žŸŸAYbAYā  
āžŸ@'ááA^@A~@^ | žžAYāā { žāAb^Abāžāāb \ žžābA { āžāŸAYāb \ žžābA'āŸāēžžAYā  
\* \ žāb^āāÉĀ.āāA^bžābŸāŸāŸŸAYZ | 'ā^@āZ \ @'áāAbāžāžŸ@'áāA & \ ābAYžAb \ @žāžA | ž@A  
b^AbāžATb \ žžābAN^āZ \ ŸbAŁZ & 'á'āb@Ÿb^@EM^Y@ZANāŸ^@AYbAbāžāžāžA^AbāžāžŸ@'ááÉ  
ŁAāb \ žžābāāā \ āžāžāžŸŸbAYāŸY | 'ā^@A { ā^ĀŸŸāŸŸbžāžAYbAbāžāžāŸāžž \ āžžAYžbžĀŸāžA  
b' & žAa^@AbāžāžŸ@'ááŸŸŸŸ \ āžžāžŸŸŸ [Ā { 'āāA^āA \ ā \ Ÿāā [ĀŸžA~ž@ & 'bžžAZ \ žAb^Abāžā  
āŸāžž \ ā'āāŸŸ^āāā ŸbāA^AYāŸY | 'ā^@É

"I 8S@QRGRSRGML MD 2CK@CPQ/6SMPSK

- I & NNC?JQ

flr 4TCPTGCU



YÉA Łaa'@&AbâŽŸ^âZ\ŸbAZŽŸ'ã'^âAYâZAbâ\ãAZŽâ[AbâŽAY~~ŽYàì  
ÝÉA P^Z'a[AbâŽAY^âZ\ŸbAZŽŸ'ã'^âì  
ÝÉA ŠŽb\ @âAb^AbâŽA^@'á'âYâATb\ZZâbAN^âZ\ŸbAŁZ&'â'âb@Yb^@ÉM^Y@ZAa^@AYAâŽ { A  
^@A~Y@b'YâA@ŽâŽY@'âáì  
ZÉA ŠŽaŽ@AbâŽAYŸãŽAb^AYAâŽ { ATb\ZZâbAN^âZ\ŸbAŁZ&'â'âb@Yb^@ÉM^Y@ZAĀ&YæŽA  
\~BAa^@AYAâŽ { A^@A~Y@b'YâA@ŽâŽY@'âáì  
ŽÉA R|Ž@b\ @âAbâŽAY^âZ\ŸbAZŽŸ'ã'^âÉ



aÉA pāŽAāb \ ZŽābā' āAŽāb' bāŽZAb^AYŽA~@ŽāŽābAbā@^ \ āā^ \ bAbāŽāāŽY@' āāAY \ bāā^bAZ \ @' āāAbāŽA  
ZŽā' YŽ@Yb' ^āā^AbāŽA T b \ ZŽābAN^āZ \ YbAŁZ & 'ā' āb@Yb^@ÉM^Y@ZÉ  
áÉA pāŽAāb \ ZŽābā' āAŽāb' bāŽZAb^A | Ž { A~Ž@b' āŽābA & YbŽ@' Yāā' ā | ^ā | ŽZā' āAbāŽAYāŽÉpāŽAāb \ ZŽābā' āA  
Žāb' bāŽZAb^A~@ŽāŽāb~Ž@b' āŽābā' āā^@ & Yb' ^āAYāZAbāŽA' āā^@ & Yb' ^āā^A { 'bāŽāāŽāDAŽ' } Yā \ Z' āāA  
YāY@YbZ@A { 'bāŽāāŽāAb^Aā \ YābYāb' YbŽAā' āēāŽ@AYāŽÉpā' āā' āYā \ ZŽāA~@^~ā' āāA \* \ Žāb' ^āāA  
b^AYŽAYāēŽZ^AAbāŽA@Žā~^āZŽābAYāZA { 'bāŽāāŽāē  
āÉA pāŽAāb \ ZŽābā' āAŽāb' bāŽZAb^Aa@ZŽZ^A & Aa@^ & AāY | 'āā' @ŽāŽ | YābA~Ž@ā^āYāā' āb^@ [AZ'āY \ āāŽZ  
^@AY'āā' ZŽ@ZAZ \ @' āāAbāŽAYāZ \ YbA~@^YŽāāÉAAbāŽA T b \ ZŽābAN^āZ \ YbAŁZ & 'ā' āb@Yb^@A { 'āā  
ZŽbŽ@ & 'āZ@ŽāŽ | YāYŽBÉ  
'ÉA pāŽAāb \ ZŽābā' āAŽāb' bāŽZAb^A { @' bāŽāAZ^Y \ & ŽābYb' ^āA^AbāŽA^ \ bY^ & ŽāAAbāŽAY^āZ \ YbA  
āŽY@' āāé  
áÉA pāŽAāb \ ZŽābā' āAŽāb' bāŽZAb^A & YāēŽAY A { @' bāŽāAY ~ŽYāA^AbāŽAZ'āY' ~ā' āY@ [AZŽY'ā' ^āA { 'bā' āā' | ŽA  
ĀGBAY \ ā' āŽāāAZ Y [āA^AbāŽAYbŽA^Aā^b' ā' Yb' ^āA^AbāYbAZŽY'ā' ^āÉAUā | Ž@ā' b [AZ'āY' ~ā' āY@ [A  
Yb' ^āāAY@ŽAY ~ŽYāZŽAb^AbāŽANŽYāA^A T b \ ZŽābāÉ

pāŽAĪO^āāNY@^āāAY^ & & \ ā' b [AŽāY^ \ @YāŽāAbāŽAŽ~^@b' āāA^aAY@' & ŽāAY [A@ŽY' ~ŽābāA^aYŽāY | ^@A  
Y^āā' ZŽ@ZAZ & 'āY^āZ \ YbAb^AUā' | Ž@ā' b [A^aa' Y' YāāYāZA' aAY ~@^~@' YbŽDA^ \ bā' ZŽāY { AŽāa^YŽ & ŽābA  
Y \ bā^@' b' ŽāÉA T ^ & ŽāDA@ŽY' ~ŽābāA^aYā' bāŽ@Ab \ ZŽāb' āA & 'āY^āZ \ YbAY@ŽāāŽā' bYābAb^A@Ž~^@bAb^A  
Uā' | Ž@ā' b [A^aa' Y' YāāAYŽY \ āŽAbāŽ [AY@ŽāY^āYŽ@āŽZAbāYbAbāŽ [AbāŽ & āŽā | ŽāA & Y [AYŽAYY \ āŽZ^A^a  
~^ā' Y [A | ^āYb' ^āāDAā \ YāAYā \ āZŽ@YāZAZ@' āā' āāÉAObā' āA' āAbāŽAYŽābā' ābŽ@ZābA^Abā' āAY^ & & \ ā' b [AbāYbAYāā  
'ābŽ@~Ž@ā^AYā | ^āŽāYŽA^aaŽāāŽāAYāZ^AbāŽ@AYYbāA^a | ^āŽāYŽAY@Z@Ž~^@bZŽAb^AUā' | Ž@ā' b [A^aa' Y' YāāÉA  
b^AŽāY^ \ @YāZAbŽ~^@b' āāDA' bā' āAbāŽAUā' | Ž@ā' b [ 'ā~@Yb' YŽAb^AYZZ@Žāā & 'ā' @A~^ā' Y [A | ^āYb' ^āā  
@ŽāYbZŽAb^AbāŽā' āY ZŽābAY [AYā~Ž@ā^A@Ž~^@b' āāYŽ' āāAbāŽA@ŽY' ~ŽābA^a' ābŽ@~Ž@ā^AYā | ^āŽāYŽA^@  
AbāŽ@AYYbāA^a | ^āŽāYŽAbā@^ \ āā' āā^@ & YāA & ŽYāé

pāŽA { ŽāaY@ŽA^aAZHYāA & Ž & YŽ@A^A^ \ @AY^ & & \ ā' b [A'āA] Ž [A' & ~^@bYābÉAŁ' bAb' & ŽāDAY^ & & \ ā' b [A  
& Ž & YŽ@āA^āAYāZ^A^aaAYY & ~ \ āA & Y [AāŽZAYāā' ābYāYŽÉO^āāNY@^āāAZāY^ \ @YāZāAYāāAb \ ZŽābAb^A  
^aaZ@AāŽā~AYāZAYāā' ābYāYŽAb^A^bāŽ@āA' āāŽZÉpāŽ@ŽA & Y [AYŽAb' & ŽāA { āŽāAb \ ZŽābAY@ŽāŽā \ YbYābA  
b^AāŽā~A^ \ bA^aAY^āYŽ@āAbāYbAbāŽ [A & Y [AaYŽAZ' āY' ~ā' āY@ [AYYb' ^āA^@AYā~^ā' Y [A | ^āYb' ^āā \ YāAYā  
 \ āŽZ@YāZAZ@' āā' āāAYbAbāŽAb' & ŽA^AbāŽA' āY' ZŽābÉUā' ā' āŽA~^ā' Y [A | ^āYb' ^āāAYāā^bAYŽA | Ž@ā' ^āēŽZDA  
a^@A & 'ā^@A | ^āYb' ^āāDAYāZŽ \ Yb' ^āYāYāZÉ^@AāŽYbāAY^ā | Ž@āYb' ^āē' ābŽ@ | Žāb' āA & Y [AYŽA@Ž' \* \ @ZŽA  
YāAYāAYābŽ@āYb' | ŽAb^AZ' āY' ~ā' āY@ [AāYāYb' ^āāÉACE^@AYZZ' b' ^āYāA' āā^@ & Yb' ^āA@ŽāY@Z' āāAbāŽA O^āZ  
TY & Y@' bYāAS^ā' Y [DAā^Ab^Aābb~ĪÉā' bZāÉY \ ÉZZ \ ÉZZYā^āāb \ ZŽābāÉ~YāŽāÉY^ & & \ ā' b [ÉābYāZY@ZāÉā^AZÉ  
āY & Y@' bYāE~^ā' Y [AÉ

fl .LRCPGK 8SQNCLQML

YÉA Ōābž' & Aā\ā~žāā'āA&Y[AÝŽA' &~āžžIÀÈBAb^Ažāā\@žābāžāYāžb [AYāZA  
 {žāāEÝž'āáA^aA&ž&Ýž'āā^aAbāžAUA'|ž@ā'b [AY^&& \ā'b [A^@A~@žāž@]Yb'^āA^aA  
 Uá|ž@ā'b [A~@^~ž@b [I^@AĐBA'āAbāžAāb\žžābA~^āžžāYāA^āá^'āáAbā@žYbA^aA  
 Z'ā@\~b'^āA^aDA^@A'ābž@āž@žāÝŽA { 'bāDAbāžAā^@ & YāA^~ž@Yb'^āāA^aAbāžA  
 Uá|ž@ā'b [É  
 ÝÉA Ń\@'āáAbāžA'ābž' & Aā\ā~žāā'^āDAYAāb\žžābAāāYāāYžAZžā'žžAYÝžāāAb^A  
 bāžA@žā'žžāÝžāYāāYāžÉ^@Ab^AbāžAÝY&~\āā'āÝā\Z'āáYāYāāžāBAYāžÉ^@A  
 b^AYāāA^bāž@AUá|ž@ā'b [AYÝb|'b'žāA^@A~@|'āžžāAa^@A { ā'YāAbāžAāb\žžābA  
 &'āābA^bāž@ { 'āžAYžžā'ā'YāžDAYāAbāžANžYāA^aATb\žžābāA^@AYAZžā'āāžžA  
 &Y[Ažžbž@&'āžAb^AYžAY~@^~@YbžÉ  
 ÝÉA ŁAāb\žžābA { 'āāYžāā^b'ā'žžA'āA { @'b'āāA^aAbā'āAYÝb'^āDAYāZAbāžA@žYā'āāAa^@A  
 bāžA'ābž' & Aā\ā~žāā'^āÉ  
 ZÉA PāžAāb\žžābA&Y[A { 'bā'āAb { ^AĐBAÝ\ā'āžžāAZY[āA^aAbāžA' &~^ā'b'^āA^aAbāžA  
 'ābž' & Aā\ā~žāā'^āDA~žb'b'^āAbāžANžYāA^aATb\žžābāA^@AZžā'āāžžAa^@A  
 @ž'āābYbž&žābÉA PāžA~žb'b'^āA & \ābAYžā'āA { @'b'āāDAYāZA & \ābā'āÝā\žžā  
 ā\~@b'^āAZ^Ý\ &žābYb'^āA^@A'āa^@ & Yb'^āAbāYbAbāžAāb\žžābAZ^žāā^bA  
 ~^āžDA^@Aā^Aā'āāž@A~^āžžāDAYAā'āá'ā'ÝYābA@'āāA^aAā\YābYāb'YāāY@ & Ab^AbāžA  
 āžYābāA^@AāYāžb [A^aA^bāž@āA^@Ab^A~@^~ž@b [ÉAŁAZžÝ'ā'^āA^aā\YāA~žb'b'^āA  
 { 'āāYžA@žYāžžAYāZAY^&& \ā'ÝYbžžA { 'bā^bA\āz\žžāY [AY [AbāžANžYāA  
 ^aATb\žžābāA^@AZžā'āāžžÉ  
 ŽÉA Pā'āA'ābž' & Aā\ā~žāā'^āAZ^žāā^bA@ž~āYÝžAbāžA@žā\āY@AY^āz\ÝbA  
 ~@^Ýžāā { ā'ÝāA { 'āā~@^ÝžžA^āAbāžAā^@ & YāāÝāžž\āžDA\~Ab^AYāžA  
 bā@^āāAYATb\žžābAN^āZ\YbANM^Y@ZAāžY@'āāDA'aA@ž' \ '@žžÉA Pā'āA'ābž' & A



ŌaYAāb \ ZŽāb'āA^ \ āZāābAōZā~āā'YāZāA^AYāābāZāYāY@āZāAā'ZŽAYáY'āābAā' & ēāZ@DA^@A' aAYA  
āb \ ZŽāb'āAZ' \ āZ@YbZŽA^@AbāZāYāY@āZāAZ@~--ZŽDAbāZāYābZābā^aAbāZā'āZā' @ZŸbā [A@ZāYbZŽA  
b^AbāZā'āY'ZŽābA { 'āAYZāZ' & ^ | ZŽAYāZAZŽāb^ [ ZŽAYbAbāZāYā'āYā \ ā'āA^AbāZāYāZē

# ; .I 84 : 7 ( \* 8 & 3 ) 1.2.98 4+ & : 9 - 47.9>

Uāb' & YbZāUā' | ZŽā' b [AY \ bā^@' b [AYāZāZā~āā'Yā' b [A' āA & YbZāZāA^āAb \ ZŽābYāZ \ YbA@Zā'ZŽA { 'bāAbāZā  
S@Zā'ZŽābA^aAō^āāNY@^āāUā' | ZŽā' b [ÉA'pāZAS@Zā'ZŽābAāYāAZZāZāYbZŽA' & ZŽ'YbZāY \ bā^@' b [AYāZA  
@Zā~āā'Yā' b [Aa^@Ab \ ZŽābYā'āZ \ YbDA \ āZŽ@AbāZāZāZā'Yāā \ ~Z@ | 'ā'āA^AbāZāU'YZAS@Zā'ZŽābA^aA  
Tb \ ZŽābAŁ.aay' @āDAb^AbāZāNŽYāA^aATb \ ZŽābāē

pāZāNŽYāA^aATb \ ZŽābāāāYāZ | Zā~A~^'Y'ZāA^@AbāZāYZ & 'ā'āb@Yb^āA^AbāZāTb \ ZŽābAN^āZ \ YbA  
T [ābZ' & AYāZA~@^YZZ \ @Yā@ \ āZāA^@AY^āZ \ Yb'āāAZ'Y'āāāAbāYbAY@ZāY^āā'ābZābA { 'bāAbāZā~@^ | 'ā'āāA^aA  
bāZāTb \ ZŽābAN^ZŽÉpāZāNŽYāA^aATb \ ZŽābāA^@AZZā'āāZŽāāāYāāAZZbZ@ & 'āZābāZā~^āA^aATb \ ZŽābA  
N^āZ \ YbAŁZ & 'ā'āb@Yb^@āDA^&~ā' b'āA^aAāZ'Y'āāAY^Y@ZāAYāZAY~ZāāYbZāY^Y@ZāDAYāZāāYāā  
ZŽbZ@ & 'āZā { 'ā'YāY^Y@ZDA^@AYZ & 'ā'āb@Yb^@AāāYāāAYZ \ bā^@' ] ZŽAb^āZāY@AZŸYāA & YbZ@ÉAN \ @'āā  
Y@ZŸā~Z@^ZāDA'āYā \ Z'āāā \ & Z@DAbāZāNŽYāA^aATb \ ZŽābāA & Y [AYāZ@AbāZā~@^YZāāAb^A~@^ | ZŽāA^@AYA  
b' & Zā [A@Zā'ā' b'ā'Ab^AYAY^ & ~āY'ābA'āZŽē

pāZāābYāZY@ZāA^@AY^āZ \ YbAZZŸ'ā'āE & Yā'āāYbAYāāZ | ZāāA^AbāZāTb \ ZŽābAN^ZŽA^aAN^āZ \ YbA  
~@^YZāāA { 'āāAYZā & YZŽA^āAbāZāYā'āA^aA { āZbāZ@A' bā'āA & ^Zā'āēZā [AbāYāA^AbāYbAbāZā~āZŽābA  
| ^āYbZŽAbāZāTb \ ZŽābAN^ZŽē

Łā [A\* \ Zāb^āA^aA'ābZ@~@ZbYb^āA^@AY~ā'Yb^āA^AbāZāTb \ ZŽābAN^ZŽāāYāāYZāZ@ZŽAb^AbāZāNŽYāA  
^aATb \ ZŽābāA^@A'āYāAZZbZ@ & 'āYb'āē

## &I 8RSBCLR (MLBSAR & BKGLQRP?RMPQ

pāZāNŽYāA^aATb \ ZŽābāA^@AZZā'āāZŽāāāYāāAZZā'āāYbZāTb \ ZŽābAN^āZ \ YbAŁZ & 'ā'āb@Yb^@āA  
{ āA { 'āāAYāā \ & ZāZā~āā'Yā' b [Aa^@AYZ & 'ā'ābZ@'āāYāZāYāā'āāZŽAb^AbāZ' & AYāZA  
Y^āZ \ Yb'āāAYZ & 'ā'āb@Yb' | ZāZāY@'āāē

## 'I 8RSBCLR (MLBSAR 'M?PBQ

pāZāNŽYāA^aATb \ ZŽābāA^@AZZā'āāZŽāāāYāāY@ZŸbZāb \ ZŽābAY^āZ \ YbAY^Y@ZāAb^āZŸ@AYYāZāA  
@ZāZ@ZŽAb^AbāZ' & ÉATb \ ZŽābAN^āZ \ YbAM^Y@ZāAYbAō^āāNY@^āāUā' | ZŽā' b [A'āYā \ ZŽābāZā  
Tb \ ZŽābAUA'āAōZŸY'āāAM^Y@ZDAbāZāUA' | ZŽā' b [AōZŸY'āāAM^Y@ZDāōZŸY'āāSYāZāDAYāZAbāZā  
Uā' | ZŽā' b [AŁ ~ZŸāāM^Y@ZÉA PZ & YZ@āā'~A^āAbāZāZāY^Y@Zā'āY [AY~ā'āb & ZābA^@A  
ZāZŸb^āāYāZāYā'ā'āYā \ ZŽāb \ ZŽābāDAAY' \ ab [DAYāZāābYāā & Z & YZ@āÉATb \ ZŽābAN^āZ \ YbA  
M^Y@ZāA { 'āāAYZāY'āY@ZŽAY [AYāā^āE] ^'āāAb \ ZŽābA^@AY^āZ \ YbAYZ & 'ā'āb@Yb^@ÉA'pāZāZā  
Y^Y@ZāAY@ZāY \ bā^@' ] ZŽAY [AbāZāNŽYāA^aATb \ ZŽābāAb^A@ZŸ^ & ZāZā { āZbāZ@AYāAb \ ZŽābāYāā  
| ^āYbZŽAbāZāTb \ ZŽābAN^ZŽDAYāZAb^A@ZŸ^ & ZāZAZ'āY~ā'āY@ [AYYb^āāA { āZāAY~@^@'YbZē

## (I (MLDGBCLR?JGRW

Tb \ ZŽābAN^āZ \ YbAŁZ & 'ā'āb@Yb^@āDA & Z & YZ@āA^aATb \ ZŽābAN^āZ \ YbAM^Y@ZāDA & Z & YZ@āA^aA  
bāZāŁ ~ZŸāāM^Y@ZDAYāZAYZ | ā^@āAZ'āY~ā'āY@ [AYYb^āāAb^Aāb \ ZŽābāDA { ā'āZāY'ā'āā'āAbāZ'@A  
^āā'Y'āYāY~Y'Y'Zā'āAā \ YāA~ā' b'āāDAāāYāāYZāZŽ & ZŽAb^AYYbAYāā~ZŸYāYāā'ābYābāAb^A  
bāZāNŽYāA^aATb \ ZŽābāDA^āZā [Aa^@AbāZā~ \ @~āZāA^aA' & ~Y@b'āāAb^AbāZāZāZŸY'āāāAbāZā  
Y'āā'ZŽāb'Yā' b [A~@^ | ZŽAY [A@Zā \ āYb^āāā^ | ZŽā'āāY^āāZāZāYāZā \ ā' | ZŽā' b'ZāÉA  
N^āā'ZŽāb'Yā' b [AYāāAY~ā'ZāAb^AbāZāY^ & ~āY'āYābāBDAYāZAYāāAb \ ZŽābāA'ā' | ^ā | ZŽē

# ; ..I & 2 \* 3 ) 2 \* 398

5JC?QC @C ?U?PC RF?R RFC NPMTGQGMLQ MD RF@Q K?LS?J ?PC LMR RM @C PCE?PBCB ?Q ?LA  
GPPCTMA?@JC AMLRP?AR @CRUCCL /MFL (?PPMJJ : L@TCPQGRW ?LB GRQ QRSBCLRQI 9FC : L@TCPQGRWA  
PCQCPTCQ RFC P@EFR RM AF?LEC ?LW NPMTGQGML MP ?LW PCOS@PCKCLR ?R ?LW RGKCI



Z'äY'~ä'äY@ [AYÿb'^ää\~äYä [Aäb\ZžábÄäBAa^\äZAb^AäY|ŽA|'äYbžZAbāŽATb\ZžābA  
N^ZžÉÄŁATb\ZžābAN^āZ\ŸbAŁZ&'ā'āb@Yb^@A { 'āāYžAYāā'āāžZAYāYAā^āE|'^āā  
&ž&Ÿž@A^AbāŽAUā'|ž@ā'b[AŌžY@'āāM^Y@ZAYāZA { 'āā@ \āAbā^āžāž@'āāÉ  
ÉĚÉA PāžAbž@ & AĀTb\ZžābAN^āZ\ŸbAM^Y@ZĀA&žYāāYā [Aā^\~A^aA~žā^āāY\ bā^@ ]žZA  
Ÿ [AbāžANžYā^aATb\ZžābAb^AZžbž@ & 'āžA^@žY^ & žāZA { āžbāž@AYāāb\ZžābAŸā  
|'äYbžZAbāžATb\ZžābAN^ZžDAYāZAb^AZžbž@ & 'āžA^@žY^ & žāZAZ'äY'~ä'äY@ [A  
YŸb'^āāDAYāY~@^~@YbžÉATb\ZžābAN^āZ\ŸbAM^Y@ZāYbAŌ^āāNY@^āāUAā'|ž@ā'b [A  
'āYā\ZžAbāžATb\ZžābUAā'^āŌžY@'āāM^Y@ZDAbāžAUā'|ž@ā'b [AŌžY@'āāM^Y@ZDA  
ŌžY@'āāSYāžāDAYāZAbāžAUā'|ž@ā'b [AŁ~žYāāM^Y@ZÉAPž&Ÿž@āā'~A^āAbāžāžA  
Ÿ^Y@ZāA'āY [AY~^~^āb&žābA^@AžāžŸb'^āYāZAYāA'āYā\ZžAb\ZžābADAŸŸ\āb [DAYāZA  
ābYaaA&ž&Ÿž@āÉ  
ÉĚÉA PāžAbž@ & A^Y\ā'āžāāZY [cAžāž@āAb^AYā [A { žžæZY [AbāYbAbāžAUā'|ž@ā'b [A^āA~žāAb^A  
Z^AY\ā'āžāāÉA PāžAUā'|ž@ā'b [AYŸāžāZY@Aāā^\āZAYžAY^āā\ābžZAA^@ZY [āAbāžA  
UAā'|ž@ā'b [A^āA^aa'ŸYāā [AYā^āžžÉ

**' I & A I L M U J C B E C K C L R Q**

pā'āAZ^Ÿ\ & žābA { Yā@ž | 'āžZA { 'bāAbāžAYāā'ābYāŸžA^aAbāžAa^āā { 'āāA@žā^\@Ÿžāi^ŁA  
P { žāb [EČE'@ābANžāb \ @ [AP^žžāTb\ZžābAN^ZžA^aAN^āZ\ŸbA P Y @ \* \žbžAUā'|ž@ā'b [^ā  
Tb\ZžābAN^ZžA^aAN^āZ\ŸbAŌ^ [^āYAUā'|ž@ā'b [A^aANā'ŸYā^āAN^& & \ā'b [ATbYāžY@ZāA  
MYāZ { 'āE ŪYāāŸžAN^āāžāž'āATb\ZžābAN^ZžA^aAN^āZ\ŸbDAYāZ^A•Tb\ZžābAN^āZ\ŸbA  
S@YŸb'ŸžčÉ

“”“fiŁ” ~ fi\ fVf! & ! žž#

**&A?BCKGA 5MJGAGCQ**

**&A?BCKGA - MLCQRW**

Ł ŸYZž&'ŸAā^āžāb [DAž]~žŸbžZa^aAž | ž@ [Aāb\ZžābDA'āAžāāžābYāAb^AbāžA~@^Ÿžāā^aAžZ\ŸYb'^āAYāZA  
b^A\~ā^āZ'āāA'āāHžbā'ŸYāābYāZY@ZāÉANāžŸb'āāDA'āŸā\Z'āāA~āYā'Ÿ'ā & DA'āY~@^~@YbžA\āžA^aA  
bžŸāā^ā [DA^@AYā [A^bāž@Aæ'āZ^aA\āžbā'ŸYāŸžāY|'^@A^@AZ'āā^āžābAŸžāY|^@DA&Y [Aā\ŸžŸbAbāžA  
āb\ZžābAb^Aāž | ž@žAYŸYZž&'ŸA~žāYābžāDA'āŸā\Z'āāAZ'ā & 'āāYāÉ



8RCN fl% pāŽAā@Ž|YāYŽA&\ābāYŽA~@ŽāžābŽZA'āA { @'b'āāAb^AbāŽAŃ'@ŽYb^@A^aATTŃÉpāŽATTŃA  
^aa'YŽA'āā^YbŽZA^āAbāŽAÓY@ZZāŌŽ|ŽāA^aAbāŽAŁZ& 'ā'āb@Yb'^āAM\ 'āz'āāDA'āāŠ^&AŁE|ÉA pāŽ  
TTŃA&Y'ā'āāAYZZ@Žāā'āATŽ@| 'YŽāA^@ATb\ZZābāA { 'bāAN'āY'ā'b'ŽāDAÉAŌ^āāANY@@^āā  
M^\\āž|Y@ZDAUā|Žāā'b[AŌŽ'āābāDARā'^AFFÈÉ|ÉA pāŽATTŃA~ā^āŽAā\ &YŽ@A'ā  
ĀĐÈHBAÉ|EFĪHIÉAŌāAbāŽAŽ|ŽābAbāŽAā@Ž|YāYŽA'āAYāY'āābAbāŽAŃ'@ŽYb^@DAbāŽAā@Ž|Yābāāā\āZA  
ā'āŽAbāŽAā@Ž|YāYŽA { 'bāAbāŽANŽYāA^AbāŽAN^āāžāŽA^aŁ @bāAYāZATY'ŽāYŽāA'āA^YbŽZA'āAbāŽAMA Ū'āā^aAbāŽA  
ŃŽYāA^AbāŽAN^āāžāŽA^aŁ @bāAYāZATY'ŽāYŽāA'āA^YbŽZA'āAbāŽAMA Ū'āā^aAbāŽA  
ŁZ& 'ā'āb@Yb'^āAM\ 'āz'āāA'āāŠ^&AMĒĒĒÉpāŽA&Y'ā'āāYZZ@Žāā'āARāā'YŽA^aAbāŽAŃŽYāA^a  
bāŽAN^āāžāŽA^aŁ @bāAYāZATY'ŽāYŽāDAÉAŌ^āāANY@@^āāAM^\\āž|Y@ZDAUā|Žāā'b[AŌŽ'āābāDARā'^A  
FFÈÉ|ÉA pāŽA~ā^āŽAā\ &YŽ@A^aAbāŽAN^āāžāŽA^aŁ @bāAYāZATY'ŽāYŽāA'āĀĐÈHBAÉ|EFĐÈĒÉ

Łā[Aā@Ž|YāYŽAāāYāāĪĀYBAŸāŽY@ā[A'ZZāb'ā[AAbāŽAaYbāAYāZāŽ|ŽābāA@ŽāYbŽZA^AbāŽAā@Ž|YāYŽĪA  
ĀYBA'ZZāb'ā[AYāāA@ŽāŽ|YābA~Ž@ā^āāAYāZAbāŽ'@A@Žā~ŽYb'|ŽA^āžāA'āAbāŽAZ'ā~\bŽĪĀYBAŽ}~āY'āAYāāA  
Žāa^@bāA\āZZ@bYæŽāAb^A@Žā^ā|ŽAbāŽA'āā\ŽA~@'^Ab^Aa'ā'āāYAA@Ž|YāYŽĪAYāZĀZBA'ZZāb'ā[AYā[A  
ā~ŽY'ā'YAA'Žā'Žāāā\āābÉAU~^āA@ŽYŽ'~bA^aAYAA@Ž|YāYŽDAbāŽAŃ'@ŽYb^@A^@AbāŽANŽYāAāāYāā  
Y^ābYbAbāŽA~Y@b'ŽāAYāZA~@^|ZZAbāŽ&AbāŽA^~^@b\ā'b[Ab^Aā\Y&'bAŽ|ZZāYŽAYāZA'ZZāb'ā[A  
{ 'bāžāāžāÉA Ū'āāžāāābYbŽ&Žābā&Y[AŸŽAā\Y&'bbŽZA'āA { @'b'āāA^AYŽAāŽY@ZAY[AbāŽA  
Ń'@ŽYb^@A^@AbāŽANŽYāAāā\āāž|ZZāYŽAāāYāāYŽAā\Y&'bbŽZA { 'bā'āAb { Žāb[E^āāžāāĐÈBAZY[āA  
a^āā^ { 'āāAbāŽAā\Y&'āā'^āA^AbāŽA { @'bbŽāAābYbŽ&ŽābÉ

pāŽAŃ'@ŽYb^@A^@AbāŽANŽYāAāāYāā@Ž| 'Ž { AYāāA@ŽāŽ|YābAŽ|ZZāYŽDAYāZAāāYāāDA'āAY~@^~@YbŽDA  
'ābŽ@|Ž { AbāŽA~Y@b'ŽāAYāZA^bāŽA { 'bāžāāžāÉA pāŽAN'@ŽYb^@AāāYāābāŽAāY'āā\ābAYāA



pāŹAUá | Žǫā' b [AŽ] ~ ŽŷbāAb \ ZŽābāAb^A@ Žŷ^áá ] ŽābāŽ' @A ~ Žā^āYā@ Žā~^āā' Y' ā' b [A' āAŷ^āb@' Y \ b' āāAb^Abā āā  
āŽY@ā' āāAYāZā' | āāAŽā | @^ā & ŽābAY [AY^āā ZŽ' āāAbāŽ' & ~Yŷbā^AbāŽ' @AZŽŷ' ā' āāAb^AbāŽ' & āŽ | ŽāAYā  
{ ŽāāYāAbāŽāŷ^ & & \ ā' b [AbŽāY@Z' āāAbāŽā \ āŽāAaYāŷ^āāEAMŽāY | ^@AbāYbA' āā' āāŽāA^āAbāŽā~ā [ā' ŷYāYāZā  
Ž & ^b' āYāA { ŽāāEŷŽ' āāA^āA^āŽāāA^@A^bāŽ' āāYāZÉ^A^AbāŽ' @A~ \ ā \ bA^āāŷā^āY@āā' ~A' āā \ āŷŷŷŽ~bYŷāŽEā  
pāŹAUá | Žǫā' b [AZ' Žāā^Abāŷ^āZā \ āŽŽ' YāŽāZ@' āā' āāAYāZāŷ^āā' ZŽ' āā' āb^} ŷYb' āāA' ZŽāb' ā' ŽZāY [A  
āā \ @@ ŽZāā~ŽŽŷāDāŽ@Yb' ŷAYŽāY | ^@DA^@AZ' āā' ŷ \ āb [A { 'bāA~ā [ā' ŷYāŷ^ā^@Z' āYb' āāBDAZ' ā^@ZŽ' ā' āŽāāDāYāZÉ^A^@A  
^āāŽāā' | ŽAYŽāY | ^@AZŽ' @' | āāAa^& AbāŽā \ āŽāAaYāŷ^āā' ŷAYŽ | Ž' YāŽāAb^AYŽā \ āŷŷŷŽ~bYŷāŽDA' ŽāY@ZāŽāā  
^AbāŽā~Žāā^āāAYāZÉA^āb^} ŷYb' āāA^@AYāŷ^āāAYŷ' āŽā { 'āāA^AbAYŽāYŷŷ~bZZAYāAYāŽ' } ŷ \ āŽāA^@A  
 \ āāY { a \ āAYŽāY | ^@A^@A & 'āŷ^āZ \ ŷbÉ

SŽā^āāā \ āZŽ' AbāŽāYāŽā^aDÉAY@Žāā^bA~Ž@ & 'bZZAb^AY^āā \ & Žā^@A~^āāŽāāAYāŷ^āā' ŷAYŽ | Ž' YāŽā \ āZŽ' @AYā [A  
ŷ' @ŷ \ & ābŷāŷŽā' ŽāY@ZāŽāā^āā^AYŷb' āāAYāZā & Y [A^Abāŷā' āAbāŽā~@ŽāŽāŷā^Abā^āŽā \ ā' āāAYāŷ^āā' āā  
Uá | Žǫā' b [AYāā' āāZā' Žā' ZŽāŷŽā@ŽāY@ZāŽāā^aYāZÉA^TŽŽāSŽā' ZŽāŷŽāO' aŽAS^ā' ŷ' ŽāāāŽ' Žā  
[ābb~lĕĕā' b'žāfāŷ' \ ěZZ \ ěZZŷā^āāb \ ZŽābāĕ~YāŽāĕŷ^ & \ ā' b \[ĕābYāZŷ@ZāĕŽā' ZŽāŷŽā' aŽĕD\] ā^@A & ^@ŽAZŽbY' āŽZā  
Ž} ~ŽŷbYb' āāA@ŽāY@Z' āāAYāŷ^āā^ābÉ](#)

Ň' āā' āāAYāZābāŽāŷYŷ@ [ 'āāA^A^~Žāŷ^ābY' āŽ' āā' āā~ \ ŷā' ŷAY@ŽŷYāA^āAUá | Žǫā' b [A~@Ž & 'āŽāAY@Žāā^bA~Ž@ & 'bZZā  
Ā \ āāŽāāā~Žŷ' ā' ŷYāā [AY \ bā^@ ] ŽZā' āAZŽā' āāYbZZAY@ZŷYāA^@ā~Žŷ' YāŽ | ŽābāBÉAbāŽāYāZāDA & Yā \ aYŷb \ @ŽDA^@A  
~ \ @ŷAYāŽā^āAYā [AYāŷ^āā' ŷAYŽ | Ž' YāŽā^āAUá | Žǫā' b [A~@Ž & 'āŽā' āā~@ā' ŷ' bZZÉA^Ň' | Žǫā^@A~YāāŽāāŽ' āā  
Uá | Žǫā' b [A] Žā' ŷāŽāAYāZAUá | Žǫā' b [ĕā~^āā^@ZZA | Žā' ŷāŽāā & Y [A^AbA~^āāŽāā^@AY^āā \ & ŽAYāŷ^āā' ŷY  
ŷ | Ž' YāŽāĕ

Tb \ ZŽābāAY@Žā' Žā~^āā' ŷāŽāA^@AbāŽāŷYŷb' | b [AbāYbA^AYŷ \ @ā' āAbāŽ' @AbāŽā' ZŽāŷŽā { āŽbāŽ' @A^āA^@A^āAYŷ & ~ \ āEā  
pāŽ' Žā^@ŽDAāb \ ZŽābāA~@^ | Z' āāAbāŽ' @AbāŽā' ZŽāŷŽāYāYā~āYŷZā^@Abā^āŽā \ āZŽ' @DÉAb^AY^āā \ & Žā  
Yāŷ^āā' ŷAYŽ | Ž' YāŽāDAZ' bāŽ' ābŽāb' ā' Yāā [A^@A@Žŷ' āāŽāā [A^āŽY | 'āāA@Žā' ZŽāŷŽā \ āāŽŷ \ @ŽZDA^AbA  
& ^ā' b^@' āāā \ ŽābāBDA' āā^AbA~Ž@ & 'bZZÉ

Tb \ ZŽābāAYāZb [AYāZAZ@' āā' āāA@Žā~^āā' ŷā [AY@ŽābāŽāUá | Žǫā' b [āā & Y' āA~@' ^@' b [A { 'bāA' ŽāY@ZAb^AbāŽāŽāYāA  
ŷ^āā \ & ~b' āāA^AYāŷ^āāEāpāŽ' Žā^@ŽDA { ŽāŽ } ~ŽŷbAb \ ZŽābāA^āAbāŽāYāZ@' āā' āāAYāŽāb^āāŽbAYā~^ā' b' | Žā  
Ž' Y & ~āŽ' Ab^AYāā & 'ā^@āŷ [AZ' āŷ^ \ @Yā' āāAYāŷ^āāE@ŽŷbZZAYŽāY | ^@AbāYbA' āAYŷ \ ā' | ŽAb^A^āŽāāA^@Ab^A  
^bāŽ' āEāSŽā' ZŽābāāb \ ZŽābāAYāZAbāŽ' @A \ ŽābāA { ā^AY@ŽāDÉA^@A^āZŽ@A & Y [AY^āā \ & Žā & ^ZŽ' YbŽā  
Y & ^ \ ābāA^AYāŷ^āā' āAUá | Žǫā' b [A@Žā' ZŽāŷŽā' āAbāŽā~@' | ŷY [A^AbāŽ' @A^@ & āA { 'bāAbāŽāZ^@AYā^āŽZā  
YāZā' āAYā & YāāŽ' @AbāYbA@Žŷ^āā' ] ŽābāŽā' āābāA^AbāŽāāEāTŽŽāSŽā' ZŽāŷŽāO' aŽAS^ā' ŷ' Žāā  
[ābb~lĕĕā' b'žāfāŷ' \ ěZZ \ ěZZŷā^āāb \ ZŽābāĕ~YāŽāĕŷ^ & \ ā' b \[ĕābYāZŷ@ZāĕŽā' ZŽāŷŽā' aŽĕD\] ā^@A & ^@Žā  
ZŽbY' āŽZāŽ} ~ŽŷbYb' āāA@ŽāY@Z' āāAbāŽā \ āŽāAaYāŷ^āā^ābÉ](#)

PŽ & ŷŽ' āA^AbāŽāUá | Žǫā' b [AY^& & \ ā' b [AY@ŽāŽ] ~ŽŷbZZAb^AYŽAY { Y@Žā^aYāZā^ŷŽ [AaZŽŽ' YāDAābYbŽDAYāZā  
& \ ā' ŷ' ~YāāY { āA^@A^@Z' āYāŷŽā@Žā \ āYb' āāAbāŽā \ āŽDA~^āāŽāā' ^āDAAYāŽā^@A & Yā \ aYŷb \ @ŽāAAYāŷ^āā' ŷYā  
ŷŽ | Ž' YāŽāĕAbā^āŽā { ā^AY@Žāŷ' bZZAa^@A | ^āYb' āāāA^āAY { A^@A^@Z' āYāŷŽāAY [A & \ ā' ŷ' ~YāDAābYbŽDA^@A  
āZŽŽ' YāAY \ bā^@' b' ŽāA { 'āāAYāā^AYŷŽāUá | Žǫā' b [AY^āZ \ ŷbA~@^ŷŽŽ' āāāÉ

pāŹAUá | Žǫā' b [A@ŽāŽ@ | ŽābāŽā@' āābAb^AbYāŽāŷ' āŷ' ~ā' āY@ [AYŷb' āāAYā' āābAYā [Aāb \ ZŽābāAb^A^āāEŷŷ & ~ \ āā  
ŷŽāY | ^@AbāYbA | ^āYbŽāAbā' āā~^ā' ŷ [ĕAbā' āā' āŷā \ ZŽāāāb \ Z [AYŷ' ^YZAYāZā' & & Žǫā' āāŽ} ~Ž' ŽāŷŽāÉ

Tb \ ZŽābāA^ \ āZā@Žā~^āā' ŷāŽāA^@Aa' @ābAYāZāāŽŷ^āZAb' & Žā | ^āYb' āāA^Abā' āā~^ā' ŷ [Abā^@ \ āāAbāŽāŷ^āZ \ ŷbA  
~@^ŷŽāāA { 'āāAYŷAYāā' āāŽZAZ' āŷ' ~ā' āY@ [AYŷb' āāAbāYbA' āŷā \ ZŽAYŷ^ & ŷ' āYb' āāA^AbāŽāA^āā^ { 'āāIAYA  
Z' āŷ' ~ā' āY@ [AābYb \ āāA' ŷāAYāUá | Žǫā' b [A ŪY@ā' āāDAN^ & & \ ā' b [AS^@ŷYb' āāDA^@AUá | Žǫā' b [AS^@ŷYb' āāI  
YāZŽ \ ŷYb' āYāA~@^āY & IAYā@ŽāāŽŷb' āāāŽ' Žŷ' āŽIAY^ & & \ ā' b [A { ^@āA^@ \ āIāā' āŽāA \ ~Ab^Ab { ^āā \ āZŽZā  
YāZā' ab [AZ' āāY@āāĀDĜĒĒĒĒĒIAY^YāA^Ab' ā' ŷYb' āā' āAY~ā' ŷYŷāŽIā~Y@ŽābÉā \ Y@Z' YāāAb' ā' ŷYb' āāIAYāZā  
& Žāb^@' āāĀĀO^Ab^A**[ābb~lĕĕā' b'žāfāŷ' \ ěZZ \ ěZZŷā^āāb \ ZŽābāĕ~YāŽāĕŷ^ & \ ā' b \[ĕābYāZŷ@ZāĕŽā' ZŽāŷŽā' aŽĕD\] ā^@A & ^@Žā  
Z' āŷ' ~ā' āY@ \[EYŷb' āāāÉ\] ā^@AYāā~Žŷ' ā' ŷYā' ābA^aAYŷb' āāāAYāā^ŷYbZZA { 'bāAYāŷ^āā^ | ^āYb' āāābÉ](#)**

: 3.; \* 78.9> 84 (.&1 \* ; \* 398 <.9 - &1 ( 4 - 41

ÉÉÁ ÞáŽáŇ@ŽŸb^@A^aATb\ZZáBáLŸb' | b'ŽáA^@AZŽá'ááŽŽA & \ábAY~@^|ŽAZ|Žábá'á | ^á | 'ááAYáŸ^á^á  
 { áž@Žáá\ZZábáAY@ŽA~@ŽáŽááS^ | 'á^ááA^@AáŽŸ | ^b [A & \ábAYŽáŸ^@Z'áYbZZA { 'báBáŽA  
 Ň@ŽŸb^@A^aATb\ZZáBáLŸb' | b'ŽáÉ

ÐÉÁ ŁááYáŸ^á^á & \ábAYŽA~\@ŸáYáŽZDAá^iZDAYáZAáYáZáŽŽAY [A0NUAŇ'á'ááATŽ@ | ŸŽáA^@AŽ | ŽábáA  
 ážáZA'áAY@ŽŸA { áž@ŽA0NUAŇ'á'ááATŽ@ | ŸŽáA^@ZáBáŽáŸ^á^b@ŸŸbA@'ááBáÉASZ@á^ááA~^áá^@'ááA  
 YŸb' | b'ŽáA { 'báAYáŸ^á^áážáZA'áA^báŽ@AY@ŽŸáA^aAYŸ & ~\áA & \ábA^ŸbY'áBáŽAY~@^@-@ŸbŽA  
 ~Ž@ & 'báÉAŁáŸ^á^á'ŸAYŽ | Ž@YážáAY@ŽA^á^bA^AYŽA^áZAYbAYá [AŽ | ŽábážáZA'áAYAUá | Ž@á' b [AAYŸ'á' b [A  
 á^bAY^ | Ž@ŽAY [AYAbYbZá \* \^@Aá'ŸžáážÉ

€ÉÁ Tb\ZZáBáLŸb' { 'ááAYŽAYZ & 'bbZZAb^AŽ | ŽábáA^á [A { 'báAYA | Yá'ZYbZZA0^ááANY@^ááAUá | Ž@á' b [A0ŇAŸY@ZA  
 ŁQŇAY\@@ŽábAAbYbZá\ZZáb'á'ŸŸb^áÉ

FÉÁ ŁbAYááŽ | ŽábáA { áž@ŽAYáŸ^á^á'ááž@ | ŽZDAá^áEYáŸ^á^á'ŸAYŽ | Ž@YážáA & \ábAYŽA~@^ | ŽZAY [AbáŽA  
 á~^áá^@'áAYŽ \* \YbŽA~@^~@b^áAbA^báŽAYáŸ^á^á'ŸAYŽ | Ž@YážáA^áYáZÉbáŽA~^áá^@AYááA  
 & \ábA~@^ | ŽZáA^áZÉ

GÉÁ Q^A^áŽááá^áZAYŽáŸ^á^áŽ@ŽZDAŽ | ŽáAá \Yb [DAb^AZ@'ááA^@A^ | Ž@'áZ\ááŽÉAŁáŸ^ŸAYáŽ | ŽábAbáYbA  
 ŽáŸ^á^@YážáZA@ \áážáážááAYáAbáŽ & ŽDA^@AbáŽAYZ | Ž@b'áž & ŽábA^aAá \ŸáYáAŽ | ŽáBDA'áA  
 \áYŸŸ~bYŸáŽAYáZA { 'ááA^bAYŽA~Ž@ & 'bbZZÉAŁZ | Ž@b'á'ááA^@A~@^ & ^b'ááAYáŸ^á^áAYáA~@' & Y@ [A  
 Ybb@YŸb^áA^aAYáAŽ | ŽábAYáZAbáŽA & Y@æŽb'ááA^aAYáŸ^á^áAY [AYŽ | Ž@YážáA & Yá \aYŸb\@Z@áDA  
 Z'áb@Ÿ\ b^@áDAŸá \ŸáDA^@A^@áYá' ]Yb^ááAY@ŽA~@^á'ŸbZZÉ

HÉÁ ŁáŸ^á^áAYáá^bAYáZA { 'ááA^bAYŽááž@ | ŽZAb^A'áb^@'ŸŸbZZA~Ž@á^ááÉ

IÉÁ ĆE^@A^aEYŸ & ~\áAYŸb' | b'ŽáA { 'báAYáŸ^á^áDAYAbá'@ZA~Y@b [A | ŽáZ^@A'áA@Ž \* \^@ŽZÉ

, :.) \* 1.3 \* 8 + 47 9 - \* 574 2 49.43 4+ \* ; \* 398  
< - \* 7 \* &1 ( 4 - 41 <.11 ' \* 8 \* 7 ; \* )

ÉÉÁ ŁááA & Y@æŽb'ááAYáZA~\Ÿá'Ÿb [A \ážZAA^áEŸŸ & ~\áA & \ábAáŽ | Ž@AŽáŸ^@YáŽA | 'áYb'ááAYá [A  
 Uá | Ž@á' b [A~^á'ŸÉ

ÐÉÁ P Y@æŽb'ááAYáZA~\Ÿá'Ÿb [A & YbŽ@ŸááA & \ábAáŽ' báž@AŽáŸ^@YáŽAYá [Aa^@ & A^aAYáŸ^á^áAYŸ \áŽA  
 á^@A & YæŽA@ŽáŽ@ŽáŸAb^AbáŽAY & ^\ábA^aAYáŸ^á^á'ŸAYŽ | Ž@YážáÉ

€ÉÁ ŁáŸ^á^á'ŸAYŽ | Ž@YážáA & \ábA^bAYŽA~@^ | ŽZAYáAY { Y@ZáAb^A'áZ' | Z\ŸáAb\ZZábA^@A  
 ŸŸ & ~\áA^@áYá' ]Yb^ááÉ

FÉÁ Q^A \áŸ^á^b@ááŽZAAŸ & ~á'ááAYáA~Y@bA^aAYŸ & ~\áA & Y@æŽb'ááA~@^áY & áááAYáŸ^á^áAYŽA~Ž@ & 'bbZZA  
 YáZáA^AŸ & ~á'ááA^@A^báŽ@A~@^ & ^b'á'áAYáŸŸb' | b'ŽáááAYáá'áŸá \ZZAAZ@'áá'ááAYáŸ^á^áAYáÉ

GÉÁ Úáž@ŽáŸ^á^b@ááŽZAAŸ & ~á'ááAYáá^@ { ŽAY [AAY | AYáZAUá | Ž@á' b [A~^á'Ÿ [DA' bA & \ábAYŽAá' & 'bZZA  
 YáAb^Ab' & ŽAYáZA \* \Ÿab' b [ÉAÞáŽáŸ^á^á \ & ~b^áA^aAYáŸ^á^áA & \ábA^bAYŽAbáŽAá^áA~\@~^áŽA^aA  
 Yá [A~@^ & ^b'á'áAYáŸŸb' | b'É

HÉÁ S@^@^b'á'áAYáŸŸb' | b'ŽáA & \ábA^bAYŽAYáá^ŸŸbZZA { 'báA^báž@ { 'ážáŽ' 'áb'ááAYŸ & ~\áA  
 Ž | ŽábáA^@A~@^áY & áA { 'bá^bAbáŽA~@^A^@á^@ { ážZáZAYáZAYáážáAb^aAbáŽáŇ@ŽŸb^@A^aAT  
 Tb\ZZáBáLŸb' | b'ŽáÉ

IÉÁ Ňá~áY [A^@AY | YáŸŸ'á' b [A^aA~@^ & ^b'á'áAYá & YbŽ@ŸááA & \ábA^áá^@ { AbáŽA~^áá'ááA~^á'Ÿ [A  
 ŽŽ | Žá^~ŽZAY [AbáŽáŇ@ŽŸb^@A^aATb\ZZáBáLŸb' | b'ŽáA^Ab^A  
 ább~íÉá bŽááŸ\ÉZZ\ÉZZYá^áab\ZZábáÉ~YážáŸŸ^ & \á b [ÉAbYáZY@ZáÉ~^Ab'ááÉ

ÍÉÁ ÞáŽáŇ@ŽŸb^@A^aATb\ZZáBáLŸb' | b'ŽáA & \ábAY~@^ | ŽAYZ | Ž@b'á'ááA^@A & Y@æŽb'ááA^@AYáAŽ | ŽábAbáYbA  
 áYáAYáŸ^á^áAY | YáŸŸážÉ

### (JC?LGLLE ?LB 2?GLRCL?LAC 5MJGAW

(JC?LGLLE ^AbáŽA~\Ÿá'ŸAY@ŽŸA'áAZŸŸA^aAbáŽA@Žá'ZŽáŸŽáAYááá'áAZ^áŽ^áAYAZŸá [AYŸá'áDA'áŸá \Z'ááA  
 { ŽžæŽáZáÉAŁáŸážZ\áŽA^@AZŸá [Ab@YááA@Ž & ^ | YáAYáZAYáŽá'ááA^aAbáŽA@Žáb@^ & áA { 'ááAYŽA~^AbZZA^áAZŸŸYá  
 @Žáb@^ & AZ^@ÉATb\ZZábA { 'báAYáŸ^á^áŸ@áAYŸ^bAYáŽáá'ážááA^aAYá [AY@ŽŸAY@ŽAYáæZZAb^A\Ÿ & 'bAYA { ^@æA  
 @Ž \* \ŽábA { 'báA~ŽŸ'á'ŸAZŽŸY'ááA^AbáŽA'áá \ŽAYáAYŽAb@Žá^ | ŽZá'áAYAb' & Žá [A & Yááž@É

ÚažáYáŽYáááA@AbáŽA&YábžáYáYžAábYaaáAY@ŽááAY@žžb@^&Ab^AYáŽYáA^A&YæžAžž~Y'@āDAbāŽA  
žžb@YáYžžāBA { 'āāYžžāYāāžžAYāZAYā^YæžžA^@A~žžA^aaEāOā'āa&YāZYb^@ [AbāYbāb \ZZābāA \āžYā^bāž@  
@žžb@^&AZ \ 'āāAbāYAb' &žžEAbāžA \ á \ žžā'b [A@žžāž] |žžābāžA@ \āābAb^AbYæžžAžž'āY~ā'AY@ [AYYb'āAYāY'āābAYā [A  
āb \ZZābāYbA | ^āYbžžāAbā'ā~ā'Y [É

## ) CKMLQRP?RGML 5MJGAW

ŁāAYāAYžžžž & YāY^& \ á' b [DĀŌ^āāNY@ @āāUā | žžā'b [A'āY^& & 'bbžžAb^AY@žžYb'āāYāžžā | 'A^ā & žžāb^aA  
'ā\* \ ' @ [A { á'YāAZ & Y'YžžāHŌžžā \ 'bDANYbāā'Yāžžž \ Yb'āā'āYāžžžY@YāA@Ab \ bāA { žžžžāYb'āAYāžžžYā^ā  
Y^& ~žž & žžābžžYā^bāžžA'āāžžY@ā'āāEāŁbāb' & žžābā'āā~ \ ' @ [A & Y [A~@^Z \ YžžY^āā'YbāA^a' ZžžYāDA  
^~ā'āāDAYāZ~@^~^ā'YāāA^@AYYb'āāEAbāžA \ á \ žžā'b [A@žžYāā' ]žžā'bāA@žžā~āā'Y'ā'b [Ab^A~@^ | 'ZZāžžāžžY' | žž  
YāYāžžāAa^@'ābžž'āYāY^& & \ á' Yb' ^āDā@žžžž'āY'āā' ^āDāYāZAb^Yb' ^āYā~žžā \ Yā' ^āAYāAbāžžā^& YāYāZ  
~@žžāžž@žžA & žžYāāAb^AY' ^āāYāZ@žžY^āā' ] ^āāZ'āžž'žžāžžāÉ

RāA^YžžYā'āAbāžžāžž~@žžā' ^āA^aAZ'āāžžābābā@ \ áāā'āZ' | Z \ YāA^AY^āžžYb' | žžAYYb' | b [A & Y [AbYæžžAbāžžAa^& A^aA  
žž & ^āāb@Yb' ^āEāŌāA \ YāAYāžžābāžžUā' | žžā'b [A & \ ābāžžžAb^Ažžā \ @žžAYaY' @AYāZ@žžYā^āY'YāžžYāYžžā  
Yžžb { žžžāb { ^āžžbāAa^@' ^āābāEAbāžžAa' ^ābā' āAbāžžA@' ^āāb^AbāžžA & žž & YžžāA^AbāžžA \ á \ žžā'b [AY^& & \ á' b [Ab^Aa@žžā [A  
~ \ @ā \ žžāžž@A^YāžžYb' | žžā' b' ^ā \ bā \ ā@žžYā^āYāžžāYāb@ \ Yb' ^āA^@Aā' āZ@YāYžžEAbāžžāžžYāZā' āAbāžžA@' ^āābAb^A  
Y^& & \ á' YbžžDāY [A~žžYžžā \ āAZž & ^āāb@Yb' ^āAYāZAZ'āāžžābDAbāžžA~^ā'b' ^āāAbāYbābāžž [AY^āāY'žžāb \ āā [A  
žžā~ \ āžžāāA' | bYā'āā \ žžāA^AbāžžAZY [EAbā'āAYYāYāYžžAžž\* \ ' @žžā@žžā~žžYbAa^@AbāžžA@' ^āābāAYāZ@žžā~^āā'Y'ā'b' žžāA^AY^bāA  
bāžžā' āāb' b \ b' ^āAYāZAbāžžā' āZ' | Z \ Yāā' ā | ^ā | žžā' āAbāžžAZž & ^āāb@Yb' ^āÉ

Ō^ { žž | žžDāžž' bāžž@Aāžžb^aA@' ^āābāA \ āb' a' žžāžž^~Y@žž' ] ^āA^@Abā@žžYbžžā' āābāžžāYāžž [A^aA~žžā^āāA^@~@^~žž@b [DA  
'āYā \ Z' āāA | žž@Y^ { Z' āāA^aY^Y & ~ \ āAY@žžYāIā' ābžžāžžāžžYžžā { 'bāA~@^YžžāžžāžžA^@~@^YžžZ \ @žžāA^āāb@ \ Yb' ^āDA  
@žžāžžY@YāDAYZ & 'ā' āb@Yb' ^āA^@Aāb \ ZZābAYb' | b' žžāY \ bā@' ] žžAb^AYžžY^āZ \ YbžžA' āA \ á \ žžā'b [AaY'ā' b' žžāA^@A^āA  
 \ á \ žžā'b [A~@^~žž@b [Iā | ^āYb' ^āA^aAZbY'ā' āāžžAY \ 'āZ' āāā \ @āIā^@A^Yāb@ \ Yb' ^āA^aAY \ bā@' ] žžAYžžžāāAb^DA \ āžžā  
^aA^@AZā@žžāAa^& A \ á \ žžā'b [AaY'ā' b' žžāEAT \ YāY^āZ \ Ybā' āAY^āb@Y@ [Ab^AbāžžA~^ā'Y' žžāYāZ^AY'žžYb' | žžāA^Abāžžā  
 \ á \ žžā'b [AY^& & \ á' b [EATb \ ZZābāA { āA~Y@b'Y'~Ybžžā' āAZž & ^āāb@Yb' ^āāAYāZāā' & 'āY@AY' b' | b [A { á'Yāā' ābžžāžžā  
{ 'bāAbāžžA@' ^āābāA^Abāžžā@AbāžžA^@žžā [Aa \ á'Yb' ^ā' āāA^AbāžžA \ á \ žžā'b [A^@AY' | 'YāY^& & \ á' b [AY@žžā \ YāžžYbAb^A  
Z'āY'~ā'āY@ [AYYb' ^āAYY^@Z' āāAb^Abāžžā \ á \ žžā'b [AAb \ ZZābAY^āZ \ YbA~@^YžžZ \ @žžāYāA { žžāAYāāžžāYāYb' ^āAYāA  
Y~@^~@^YbžžÉ

Œ^@AbžžYā^āāA^āžžāžžYā' āa^& Yb' ^āDāYāā' ābYāYžžDāY^@bžžā [AYāZā^āZ^@žžDāYāZAb^AYāā \ @žžAbāYbābāžžā  
Uā | žžā'b [A' ā' ā' āY^& ~ā' Yāžžā { 'bāAžžāYāYāZAY^žžāžž\* \ ' @žž & žžābDAbāžžA \ á \ žžā'b [A~@^Yžžāāžž\* \ ' @žžābāYbA  
āb \ ZZābāY^ābžž & ~āYb' āāAZž & ^āāb@Yb' ^āAYāZāā' & 'āY@AY' b' | b' žžāA & Yæžžāžž' @' ābžžāb' ^āāAēā' { ā' āAYZ | YāYžžā  
b^AbāžžāžžYāA^ATb \ ZZābābā@ \ áāAYa & žžb' āāAb^AZ'āY' āāAbāžžAY@Yāāžž & žžābAa^@Abāžžāžž | žžāYāZAY^& ~āžž' āāAYa  
žž & ^āāb@Yb' ^āA@žžā' āb@Yb' ^āAa^& Aa^@AY~@^ | YāÉ

bāžžā \ āžžāAbāžžā \ á \ žžā'b [Aa^@ \ & Aa^@Ažž] ~@žžā' ^āA^a' ZžžYāA^@A | žž { ~^ābāAZžžāā^bA' & ~ā [AYYžž~bYāYžžA^@  
žžā^@āžž & žžābAY' AbāžžUā' | žžā'b [A^Abāžžā] | žž { āžž } ~@žžāžžÉ

## ) PSE 5MJGAW

.11 \* , &1 &3 ) 57 \* 8 ( 7.59.43 ) 7 : , 8

pāžžUā | žžā'b [A~@^ā' Y' bābāžžā' āāžžāYā \ āžžDA~^āāžžāā' ^āDāYāžžDZ' āb@ \ Y' b' ^āDA & Yā \ aYb' \ @žžDāYāžžE^@A^@ { bāA^aA  
'āžžāYāDāā | ābāžžb' YDā^@AY^@ \ ābžžāžž' bAZ@ \ áāA^āUā | žžā'b [A~@^ā' & 'āžžāA' āYā \ žžāA~@^~žž@b [A~@^žž@YbžžA^aaAbāžžA & Y' āA  
Y^& ~ \ ābDāYbAYā [AUā | žžā'b [Aā~^āā^@žžāžž] žžāb^@A~@^ā@Y & Aā' āYā \ Z' āāAb \ Z [AYY^@^YZAYāZā' & žž@ā' ^āA  
žž] ~žž @ žžāYžžābāžžāY@žžāžžāA^aA { āžž@žžā' bAbYæžžāA~āYžžEāŁāā^Y'Yb' ^āA { 'bāA' āYā \ Z' āāAbāžžA~@žžāžžāY'YbA  
āYbāžž@' āāā' ā' | ^ā | 'āāā \ YāA \ āžžDA~^āāžžāā' ^āDāYāžžDZ' āb@ \ Y' b' ^āDA & Yā \ aYb' \ @žžA^@A^@ { bāA' āYāā^A  
~@^ā' Y' bžžžEā^āāžžāā' ^āA^@A \ āžžA^ažž\* \ ~ & žžābDA~@^Z \ YbāDā^@A & Ybžž@' YāāDābāYbAYžžā \ āžžA^@AY@žžAbžžYā^āYā [A  
Yāb' Y' ~YbžžAb^AYžžā \ āžžZā' āAbāžžA & Yā \ aYb' \ @žžDā^@ { bāDAZ' āb@ \ Y' b' ^āDāYāžžDā^@A \ āžžA^aA' āāžžāYāDāā | ābāžžb' YDā^@A  
Y^@ \ ābžž@āžž' bAZ@ \ áāA^@A' āAbāžžA & 'ā \ āžžDāYāžžA^@AZ' āb@ \ Y' b' ^āA^a~@žžāY' ~b' ^āAžž \ áāā' āA~@^ā' Y' bžžžEāO) Y & ~āžžā^aA  
žž\* \ ~ & žžābDA~@^Z \ YbāDāYāZā & Ybžž@' Yāā' ā' Yā \ ZžžAY \ bAY@žžā^Abāā' & 'bžžAb^AY^āāāā~ \ @YāYāžžA^@A^& žžE & YžžBDA

~'~žāDA@hāāáA~Y~žāDA|Y~^@'jžāDAāYyāžāDAYāZAá@'āZZ@aÉ

pāžA&'ā\āžA^aA~@žāY@'~b'^āAYāZ^A|žāAbāžāY^ā\ābžAZ@ \āā'āā^bA~ž@&'bbžžÉA pā'ā'āYā\žžāāāY@'āāAYA  
~@žāY@'~b'^āA { 'bāA\āY\ bā^@' } žžA~žā^āāDAžžā'āāAYA { ā^āžA^@A~Y@b'YāA~@žāY@'~b'^āAb^A\āY\ bā^@' } žžA  
~žā^āāDA'ābžāb'^āYāā [AY^&'Y'ā'āāAYA~@žāY@'~b'^āA { 'bāA^bāž@Aā\YābYāYžāDA~^āāžāā'āāÉ\ā'āāAYA~@žāY@'~b'^āAZ@ \āā  
ā^bA~@žāY@'YžžAb^A [ ^\ DAYāZA'ābžāb'^āYāā [AZ}YžžZ'āāAbāžA~@žāY@'YžžAZ^āYāžA^aYAZ@ \āÉ

Tb \žžābāAa^ \āZAžā~^āā'YāžAbā@^ \āāAbāžāY^āZ\YbA~@^YžžāāA^@AbāžāYāžDAZ'āb@'Y\ b'^āDA & Yā \āYŸb \ @žDA  
YāžÉ^@Aā@^ { bāA^aA'āāžāYāDAā [ ābāžb'YDA YāžÉ^@AY^ \ ābž@až' bAZ@ \ āāāā^ \ āZāž } ~žYbAb^A Yžžā \ ā~žāžžA^@AZ } ~žāžžA  
a@^ & AbāžA \ ā' | žžā' b [ ÉA pā' āAYāā^AY ~~ā'žāAb^Aāb \žžābāA^ \ āZA@žā~^āā'YāžAa^@AbāžāYāžAYāžÉ^@AZ'āb@'Y\ b'^āA^aA  
~@žāY@'~b'^āAZ@ \āāÉ

Pž&Yžā^aAbāžA Uā' | žžā' b [AY^& & \ā' b [AY@žāž } ~žYbžžAb^AYžAY { Y@žA^aYāZ^A^Yž [Aažžž@YāDAābYbžDA YāZA  
& \ā'Y'~YāāY { āA^@A^@Z'āYāYžāA@žā \āYb'āāAbāžA \āžDA~^āāžāā'^āDAāYāžDAZ'āb@'Y\ b'^āDA & Yā \āYŸb \ @žDAYāžÉ^@A  
ā@^ { bāA^aA'āāžāYāDAā [ ābāžb'YDA^@AY^ \ ābž@až' bAZ@ \ āāÉA pā'āžA { ā^AY@žāY' bžžAa^@A | 'āYb'^āāA^aAāY { A^@A  
^@Z'āYāYžāAY [DAažžž@YāDAābYbžA^@A & \ā'Y'~YāAY\ bā^@' b'žāā&Y [AYāā^AaYŸžA Uā' | žžā' b [AY^āZ\YbA~@^Yžžž'āāāÉA  
pāžA Uā' | žžā' b [A@žāž@ | žāAbāžA@'āābAb^AbYāžAZ'āY'~ā'āY@ [AYŸb'^āAYāY'āābAYā [Aāb \žžābAa^@A^aEŸY & ~\āā  
YžāY | ^@AbāYbA | ^āYbžāAbā'āA~^ā'Y [É

Tb \žžābāAāā^ \āZAYžAY { Y@žA^aAbāžA~žāYāb'žāAa^@AZ@ \āA | ^āYb'^āāÉA Tb \žžābāA { ā^AY@žāY@' & 'āYāā [AY^ā | YbžžA^aA  
Z@ \āA^aA'āāžāāžā&Y [Aa^āžāžžž@YāA^@AābYbžā'āYāY'YāY'ZÉA Tb \žžābāA { ā^Aa^āžAY'Z\žžAb^AZ@ \āA | ^āYb'^āāA  
YŸāY^ābYŸbAbāžACE bāYāY'YāY'ZURaa'YžAYbAÉHT ^@ÉYāB É M šb \Z āāY `@ÉÉHP `@

ŽŸ@ZDabâŽAâb\ZZâbâYâAbâŽA'ââAb^A~âYŸŽAYââYbŽ&ŽâbA { 'bâAbâŽA@ŽŸ^@ZââŽbb'ââAa^@bâââ'âA^@AâŽ@A  
| Ž { AYŸ^ \ bAbâŽAŸ^âbŽâbŽZA'âa^@ & Yb'^âÉ

€ÉA PaŽA@'ââbAb^AŸ^ââŽâbAb^AZ'âŸ^â\@ŽâA^aA~Ž@â^âYââ [ A'ZZâb'a'YŸâŽA'âa^@ & Yb'^âAŸ^âbY'âŽZA'âAbâŽA  
âb\ZZâbâAŽZ\ŸYb'^âA@ŽŸ^@ZâDAŽ}ŸŽ~bAb^AbâŽAŽ}bŽâbAbâYbACEOŠSŁAY\ bA^@ ]ŽâAZ'âŸ^â\@ŽA { 'bâ^ \ bA  
Ÿ^ââŽâbÉ

RâŽAŽ}ŸŽ~b'^âAbâYbA~Ž@ & 'bâAZ'âŸ^â\@ŽA { 'bâ^ \ bAŸ^ââŽâbA'âAZ'âŸ^â\@ŽAb^AâŸ^â^âA^aa'Ÿ'YââA { 'bâA  
âŽâ'b' & YbŽAŽZ\ŸYb'^âYâA'âbŽ@ŽâbâÉAŁAâŸ^â^âA^aa'Ÿ'YâA'âAYA~Ž@â^âAŽ&~â^ [ŽZAY [AbâŽAUâ | Ž@â'b [A'âAYâA  
YZ&'â'âb@Yb | ŽDAâ \~Ž@ | 'â^@ [DAYŸYZŽ&'YA^@A@ŽâŽY@ŸâDA^@Aâ \~^@bAâbYaa~^â'b'^âAâ'âŸ^â\Z'ââAŸ { A  
Žâa^@ŸŽ&ŽâbA \ â'bA~Ž@â^ââŽâAYâZâŽYâbâAâbYaaBIAYA~Ž@â^âA^@AŸ^â & ~Yâ [A { 'bâA { â^ & AbâŽAUâ' | Ž@â'b [A  
âYâAŸ^âb@YŸbŽZââ\ŸâAYâAYâAYbb^@âŽ [DAY\Z'b^@DA^@AŸ^ââŽŸb'^âAYâŽâbBIAYA~Ž@â^âAâŽ@ | 'ââA^âAbâŽA  
Ÿ^Y@ZA^aAZ'@ŽŸb^@âiA^@AYAâb\ZZâbAâŽ@ | 'ââA^âAYâA^aa'Ÿ'YâAŸ^â & 'bbŽZDAâ\ŸâAYâAYAZ'âŸ^â'âY@ [A^@A  
â@ Ž | YâŸAŸ^â & 'bbŽZDA^@AYââ'âb'ââAYâ^bâŽ@AâŸ^â^âA^aa'Ÿ'YâA'âA~Ž@â^@ & 'ââA^âA^@AâŽ@AbYâââÉAŁA

á & bZZAb^bYáZžÉáb \ ááá \ ááDAæá' | ŽāA { 'bāAa' } ŽZÁYáYZZāDAā { 'bYāYáYZZāDAā~@' ááEá^YZZāæá' | ŽāDA~^YāæŽbA  
æá' | ŽāA { 'bāYāYZZāā^āāŽ@AbāYāADĀĀ' áYāZāDAAYā [A' bZ & A' áYā \ Z' ááAæ' bYāZāA \ bZāā' áāA \ áZZāA^@AYāA  
'áY~@^@~@YbZā~ \ @~^āZDA & Y@b' YāAY@bāA { ŽY~^āāDAY^ { AYāZAY@^ { āA^aAYā [Ab [~ZDAā { ^@ZāDAY@YāāAæā \ YāāZāDA  
āā' áāAāā^bāDAŽ' ~^ā' | ŽāDA^@A' áYāZāZ'Y@ [AZZ] 'YZāÉA'Pā' āA~^ā'Y [AYāā^AY^ { ŽāāAYā [A^bāZ@A' bZ & āAZZŽ & ŽZAY [A  
Ó^āāANy@^āāS^ā' YZāNŽ~Y@b & ŽābAb^AYZAYāáZ@^ \ āDA' áYā \ Z' ááAāY [Y@Z^ \ āYāZ & Yāā^@AY' ^ā' á' YāA & YbZ@' Yāā^aA  
Yā [Aā^@bEāL' áā^ā' áYā \ ŽZZAY@ŽAZ' ā~āY [āÉY^āāZ'Yb' ^āāA^AbāZAY^A | ŽāAY & ŽZā' bZ & āDA^@āY & ŽābYāA { ŽY~^āāAYāZA  
^@āY & ŽābYāY & \ á' b' ^āÉ

Łā [A~@^ā'Y' bZZA' bZ & āAY@ŽāA \ YāZ'YbAb^AY^āā' āY'Yb' ^āAYāZA~Ž@ & YāZāAbA^@aZ' b \ @ŽA { 'bā^ \ bAYā [AZ] ~ŽYb'Yb' ^āA^aA  
@Zb \ @āA^@AZ' & Y \ @āZ & ŽābÉ

Łā [ASZ@ā^āA { ā^AYZ'Y^ & ŽāAY { Y@ŽA^aAYA | 'ā'Yb' ^āA^Abā'āA~^ā'Y [AāYāAYāÉ] iKAb^A' & & ŽZ'YbZ@ [Aā^b' a [AbāZā  
ÓNUSŃĀĀĎÉHEÉĪ | EĒĒ€FBÉ

ŒY'ā \ @ŽAb^AYZāZž@ŽAb^Abā' āA~^ā'Y [A' āY^āā' Zž@ŽZAYāāZ@' ^ \ āA & YbZ@ÉAÓNUSŃĀ { 'āā' ā | Žāb' áYbZAYāāA  
| ^ā'Yb' ^āāAYāZA@ŽāZ@Ab^AbāZāY~@^@~@YbZAUā | Žāā' b [AZZ~Y@b & ŽābA^@AZ] bZ@āYāYāZāY [AYāā' āa^@ & Yb' ^āA  
āZ'YZāāY@ [Aa^@Zāā^@YZ & ŽābAYāZA@Žāā \ b' ^āÉ

PaZAY^ | Žā~@^ā'Y' b' ^āAY~ā' ŽāA@ŽāY@ZāZāā^aA { aZbāZ@AbāZASZ@ā^āAAYāAYA | Yā ZāāYbZā~Ž@ & 'bAb^AYY@@ [AYA  
a @ŽY@ & É

PaZāA^āA { 'āāA@ŽY@ & āAY@ŽAZ' } Yā \ ZZZāA@^ & Abā'āA~@^ā'Y' b' ^āāI

ÉÉA Łā @ŽY@ & A' āAbāZā~^āāZāā' ^āA^aAYāA^āEZ \ b [AāY { AZāa^@YŽ & ŽābA^aa' YZ@DAZ \ à [AY \ bā^@'] ŽZAb^A  
Y'Y@@ [AbāZā@ŽY@ & AY [Aā' āÉāZ@AZ & ~ā^ [ 'āāAāY { AZāa^@YŽ & ŽābAYāZāY [DAYāZAY'Yb' āāA^āAYZāYāA^aA  
YāZA { 'bā' āAbāZāY^~Zā^aAā' āÉāZ@A^aa' Y'YāZ \ b' ZāA { 'bāAā \ YāAYāZāY [A { ā' āZā^āAYY & ~ \ āA^@AYbAYA  
Uā | Žāā' b [AZ' @ŽYbZAY'Yb' | b' É

ĎÉA Łā @ŽY@ & A' āAbāZā~^āāZāā' ^āA^aAYAY'Y & ~ \ āŠRbNA & Ž & YZ@A { āZāA~Y@bA^aAYāA^aa' Y'YāāŠRbNA  
a' āYb' ^āDA { āZāAY \ bā^@' ] ŽZAY [AYA~@^āZāā^@A^aP' ā' bY@ [AT'Y' ZāYZAYāZAYabZ@A^b' ā' Y'Yb' ^āA^AbāZā  
Ń' @ŽYb^@A^aAÓNUSŃĒ

€ÉA Łā @ŽY@ & A' āAbāZā~^āāZāā' ^āA^aAYA~Ž@ā^āA { ā^āAYāA@ŽYZ' | ŽZā~@' ^@A { @' bZāAY \ bā^@' ] Yb' ^āA@^ & A  
bāZāŃ' @ŽYb^@A^aAÓNUSŃĒ

Łāā { 'bāA^ \ @A^bāZ@AY^āZ \ YbA~^ā'Y' ZāDAÓ^āāANY@^āāAb \ ZZābāAY@ŽāZā~^āā' YāZāA^@AbāZāYZāY | ^@A^aAYā [A  
á \ ZābAbāZ [AāY | ŽāāAYY & ~ \ āÉAÓ^āāANY@^āāAb \ ZZābāA { 'āāAYZāZāZAY'Y^ \ ābY'YāZāAb^ \ āāAbāZāTb \ ZZābA  
N^āZ \ YbAS^AYZāā' aAbāZ' @Aá \ ZābāA | ^ā'YbZAbā' āA~^ā'Y [ÉAÓa [ ^ \ aAY | ŽAYā [A\* \ Zāb' ^āāAY^ābY'YbAbāZāŃ' @ŽYb^@A^aA  
bāZāÓ^āāANY@^āāS^ā' YZāNŽ~Y@b & ŽābÉ

# , MMB 8? K?PGR?L 5MJGAW

ŁbAÓ^āāANY@^āāUA' | Žāā' b [DAbāZāAYāZb [AYāZA { ŽāaY@ŽA^aAZ'Y'YāA & Ž & YZ@A^aA^ \ @AY^ & \ á' b [A' āAY@' b' Y'YāÉAŁbA  
b' & ŽāDAY^ & \ á' b [A & Ž & YZ@āA^āAYāZāA^aAYY & ~ \ āA & Y [AāZZAYāā' ābYāYZÉAÓ^āāANY@^āāAZ] ~ŽYbāYāāA  
āb \ ZZābāAb^AbYæZā@Žā~^āā' YāZAY'Yb' ^āA { āZāA^bāZ@āAY | ŽAYā & ŽZ'Y'YāZ & ŽāZāY [A^@AY@Zā' āAY@' ā' āAY [A  
Y^ābY'Yb' āāAY~@^@~@YbZā^aa' Y'YāZāZ' | Žāā { āZāA | 'ā'Yb' ^āāA^AbāZāTb \ ZZābAN^ZZA & Y [AāY | Žā  
^Y'Y' @@ŽZÉAŁbAbāZāb' & ŽāA^AbāZā' āY' ZZābDAāb \ ZZābāA & Y [AYZā@Zā \ YbYābAb^AāZā~Aa^@AY^āYZ@āAbāYbAbāZ [A & Y [A  
aY'YZAZ' āY' ~ā' āY@ [AY'Yb' ^āA^a^AYA~^ā'Y [A] 'ā'Yb' ^āÉA'PāZāUA' | Žāā' b [Aāb@^āāā [AY^āā' ZZ@āAbāZā~^ā' b' | Žā' & ~Y'YbA^aA  
bYæ' āāA@Žā~^āā' YāZAY'Yb' ^āA { āZāAZZbZ@ & 'ā' āAbāZāY~@^@~@YbZā@Žā~^āāZāA^@AYāZāZā~^ā'Y [A] 'ā'Yb' ^āāA  
@ZāYb' āāAb^AbāZā' āY' ZZābÉA'PāZā@Žā@ZDAbāZāÓ^āZATY & Y@' bYāAS^ā'Y [A' āA' āA~āY'ZAb^AYāāZ | YbZāā \ YāAY^āYZ@āā  
YāZā@ZZI \ YZāZā' bYb' ^āAY [AÓ^āāANY@^āāAb \ ZZābāAb^AāZZæAYāā' ābYāYZÉ

PaZāÓ^āZAY & Y@' bYāAS^ā'Y [AYāā' { āAa^@AbāZāZā' & 'ā'Yb' ^āA^aAZ' āY' ~ā' āY@ [AY^āāZ@ + ā Zāāā' ābYāYZÉ āY

Ž&Žážáŷ[A~ŽááážáÉPaŽAÓ^ZATY&Y@bYaAS^áŷ[AY~~áŽááAá\Yb^ááAá]A|ááAYáŷá^áDA  
^báŽ@AZ\ááDAábž@~ŽáááYáA|ááŽáŷZDAYáZ^báŽ@Aá\Yb^ááAY^ááZŽ@ŽZAZYááZ@^áŷ[AYA  
@ŽYááYáZá~ŽáááÉA9FGQ KC?LQ RF?R LM DMPK?J : LGTCPQGRW B@QAGNJGL?PW ?ARGMLQ MPA  
Q?LARGMLQ U@GJ @C ?QQ@ELCB RM RFC PCNMP@GLE QRSBCLR^Q^DMP K@LMP T@MJ?R@MLQ PCJ?R@LE RMA  
RFC @LAGBCLRi PaŽAáŷZžáA { ááAáb ááAYáZ^áŷ\ & ŽábžZAYáZáZŷŷYb^ááYáYáZÉ^@AáŽYábA  
ŷ^á|žááY^ááÉábž@|žáb^ááA&Y[AYáZ@ž\* \ @žZAYáAYáAYábž@áYb|žAb^AZ^áŷ~ááY@[AáYáŷb^ááÉ

PááA~^áŷ[AZ^Žáá^bA~@^bžŷbA@ž~žYbžZDAaYáYáBDA^@Aáž@^áA|ááYb^ááA^aAbáŽATb\ZžáBaN^ZžAžÉáÉA  
Yŷ\á|žáŷ^áZ\ŷbDAábž@~žáááYáA|ááŽáŷZDAYáZ^báŽ@Aá\Yb^ááAYáŷá^ááAYáZÉ^@A^báž@AZ\ááDAáY]ááDabážAbDA  
~@^~ž@b[AZY&YáZDAžbŷÉBA^@A|ááYb^ááAAbáYbAáY@&AYá^báž@A~žááA@ž\* \ @ááZ&žážáŷ[A@žá~^áážDA^@A  
Z^žáAbážA~^áŷ[A~@žŷá\ZžA^@A~@ž|žábAYŷb^ááY[A~^áŷžA^@AážAYáY\bA^@bžAÉ

ÓáAYáá\Yb^ááAá]A|ááA& & ážáBazyááž@Ab^AbážAážYábáAYáZÉ^@AáYážb[A^aAYá[A^áZ|Z\YááBDAáb\ZžáBáAY@žA  
ž}~žŷbžZAb^i

- ÉÉA N^ábYŷbAÓNUSŇAÁĐÈHEÉÍ IEÉĐ€FBDAŠžáZžáŷžAÓ^ažDA^@A^báž@Až&žážáŷ[A  
^aaŷŷááAb^A@ž~^@bAbážA^áŷZžábi
- ĐÉA Šž&Y^áA { bAbážA^áZ|Z\YááBAAžžž^ááž&žážáŷ[Abžŷb&žábAYáZAY^~žŷbžA { bAA  
ž&žážáŷ[A~žáá^áážáAYáAáAYáA^ááAYáZ^Ab^AZ^A^i
- €ÉA PžžbA { bAAAY~@^~@YbžAUá|ž@á\A^aaŷŷááAYabž@AbážA^áŷZžáBAYáZAY^~žŷbžA { bAAAYá[A  
Uá|ž@á\A^a|žáb^áYb^ááÉ

CEY^á\@žA^aAb\ZžáBAb^AbYáZ@žá~^ááYáZAYŷb^ááA^áZž@Abá^áA~^áŷ[A { áž@žAYŷb^ááAYáZŷ@A { Y@YábžZAY  
YáZáAY@&A@žá\ábáA&Y[DA^áAžážá^áŷ\áŷ@ŷŷ\ &ábYáŷžáDAŷ^ááb\AbžAAžAZYááž@^ááAYá[A~žáá^ážbáž@A  
^ábžá\áŷáA[A^@A@žŷáážáá[A^ááZž@AbážATb\ZžáBaN^ZžAYáZAY^áZ@žá\ábA^áAZ^áŷ~ááY@[AYŷb^ááAbá^á^ááAbážA  
Tb\ZžáBaN^áZ\ŷbAT[áŷ&ÉAbá^áA~^áŷ[AZ^Žáá^bA~@^|ZžAY&ážáb[Aa^@Aáb\ZžáBáA { áA@ž~^@bAbáž@A^ { áA  
&žžŷYáž&žážáŷ[É

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Ó^ááANy@^ááAUá|ž@á\A^aaŷŷááAYabž@^áážbáŷŷáAYáZ&^@YáA|Yá\žáAbáYbAY@žáŷ^ááábžáB { bAA  
Óžá\^bAYáZANyBá^áŷAb^YZ^b^ááÉA& &^ááAbážAYžábYáA|Yá\žáA^aAbážAUá|ž@á\AY@žAbážA^ááž@žáBZ^áá\žáA  
^aAž|ž@[A^áZ|Z\YáAYáA { žááAYáAbážA@^ááAb^ažŷŷá~ž@á^Ab^a^áZAYáZAb^Až}~@žááá^áA^aAž@A|ž { ~^ábÉA  
ÚážáAbážážA|ž { áŷ^áááŷbA^áAbážA^áŷ^áYb^ááA^aA&ž&ŷž@áA^aAbážAY^& & \á\Ab^A@žá~žŷbAbáž@A  
~ž@á~žŷb|žáÉ

PažAUá|ž@á\A^aaŷŷááAYabž@^áážbáŷŷáAYáZ&^@YáA|Yá\žáAbáYbAY@žáŷ^ááábžáB { bAA  
b^Ažáá\žAbáYbAbáž[A { ááA^áZAbážAUá|ž@á\A^aaŷŷááAYabž@^áážbáŷŷáAYáZ&^@YáA|Yá\žáAbáYbAY@žáŷ^ááábžáB { bAA  
^áŷŷž~bŷŷáZAYáZAY|ááYb^ááA^aAUá|ž@á\A^aaŷŷááAYabž@^áážbáŷŷáAYáZ&^@YáA|Yá\žáAbáYbAY@žáŷ^ááábžáB { bAA  
~ž@á^áAYžŷŷážA^aYážDA^YŷžDAžážž@DAžbááŷŷb[DAáž]\YáA^@žábYb^ááDA@žá^á^áDA^@AZ^áŷŷ^á\É

Ó^ááANy@^ááAUá|ž@á\A^aaŷŷááAYabž@^áážbáŷŷáAYáZ&^@YáA|Yá\žáAbáYbAY@žáŷ^ááábžáB { bAA  
YŷbAbAZ^žŷbžZAYbAYáA^áZ|Z\YááBAA^aAbážAYá^áA^aAYáZDA^YŷžDAžbááŷŷb[DAážážž@DAáž]\YáA^@žábYb^áDA  
@žá^á^áDA^@AZ^áŷŷ^á\A { bAA^ábžáb^áAb^A^áb^&ZŷbžA^@A^á\@žAYáA^áZ|Z\YááBAA~á[áŷŷá[DA&žábYá[DA^@A  
ž&^b^áAYá[ÉAÓYbžA&^b|YbžZAA^aažážáAY^&~@^&ážAbážA^ábžá\A^aAbážAÓ^ááANy@^ááAUá|ž@á\A^aaŷŷááAYabž@^áážbáŷŷáAYáZ&^@YáA|Yá\žáAbáYbAY@žáŷ^ááábžáB { bAA  
ŷ^& & \á\AYáZAY^áááb\bžA|ááYb^ááA^aAbážAÁOááYá^áá^áAY^Yáá&žábAYážZAA^áAYáZDA^YŷžDAžážážž@DA  
žbááŷb[DAáž]\YáA^@žábYb^áDA@žá^á^áDA^@AZ^áŷŷ^á\A^aaŷŷááAYabž@^áážbáŷŷáAYáZ&^@YáA|Yá\žáAbáYbAY@žáŷ^ááábžáB { bAA  
ŷŷážA^aA&^áŷ^áZ\ŷbDA^áŷ^áZ^ááAYbžA&^b|YbžZAA^aažážáDAŷ^bAbážA@žá~^ážžábAYáZAbážAb\ZžáB { áA  
ŷžá|žáááéážáYáŷžžáAY@žŷ~žábA^aAbážA@žá~^ážžábA&^áŷ^áZ\ŷbAY|ž@^áábAbáYbAY@žáA^áBžZ  
bA^á^áAbážATb\ZžáBaN^áZ\ŷbAS^ŷŷááÉPažážA@^ááBAY@žáŷ^áY^ážZAA^aAbáž@Ažáb@žb[Aáž@žA  
ább~jÉÉá\žááŷŷÉžZŷŷá^ááb\ZžáBáÉ~Yážáŷŷ& & \á\ÉábYáZY@žáŷ^áZ\ŷbÉa|ábž&É

P Ž & Ÿ ž ā ā a b ā ž ā ō ā ā n y @ @ ^ ā ā u ā | ž ā b [ a Ÿ & & \ ā b [ a y ā ā ž Ÿ b ž z ā ý [ a ā y b ž ē & ^ b | y b ž z ā ā ā ž ā ā ž ā ā ž ā ā b @ ^ ā ā ā [ a ž ā Ÿ y b \ y ā ž z ā b ā ^ ž ~ ^ @ b ā b ā ž ā ž ā ā ý ž z ā b ē ā t \ ý ā ā ā ā ā ž ā ā ž ā ā ý ā ý ž ā ž ~ ^ @ b ž z ā b ā y ā | y @ ž b [ a ^ ā ā ā ā ý ž z ā ā ā ā ý y & ~ \ ā ā ā ý ā \ z ' ā ā ā ā ž ā ā ā ā t b \ z z ā b ā ā r ā ā ý ž d ā r ā ā ý ž ā ā ā š ž ā z z ā ý ž ā ō ā ž d ā ō ā ā ā n y @ @ ^ ā ā ā s ā ý ž ā ā ž ~ y @ b & ž ā b d ā y ā z ē ā @ b ā ā \ ā ā ā b ā ž ā m \ y ā ā ō ā ý ž z ā b ā š ž ~ ^ @ b ā ā ž ā ā b b ~ ě ě ā b ž ā ē ā ý \ ě ž z \ ě ý y ā ē ~ y ā ž ā ē ž ~ ^ @ b ē ý y ā ē

T b \ z z ā b ā ā ā \ ā z ā ž ā ~ ^ ā ā ý ž ā ā ā ā y b ž ē & ^ b | y b ž z ā | ' ā y b ' ā ā ā y @ ž ā ā \ ý ā ž Ÿ b ā b ā y ā y ā y ā ā ž ā ā ā z ' ā ý ~ ā ā y @ [ a y Ÿ b ' ā ā ā \ ~ ā b ā y ā z ā ā ý ā \ z ' ā ā ā ž } ~ \ ā ā ā ā ā & ā b ā ž ā u ā | ž ā b [ ě

p ā ā ā ~ ā ý [ a ' ā ā ā ž ~ y @ y b ž ā y ā z ā z ' ā b ' ā ý b ā ā ā & ā b ā ž ā ō ā ā ā n y @ @ ^ ā ā ā u ā | ž ā b [ a t ž } \ y ā ā ō y y ā ā & ž ā b ā ~ ā ý [ ā b ā y b ā ý ā ā ý ž ā ā \ ā z ā ā ž ā ā b b ~ ě ě ā b ž ā ē ā ý \ ě ž z \ ě ý y ā ē

## - ?XGLE 5PMFG@GRGML 5MJGAW

Ō b ā ā b ā ž ā ~ ā ý [ a ^ ā ā ō ā ā ā n y @ @ ^ ā ā ā u ā | ž ā b [ ā b ā y b ā ā y ] ' ā ā ā ý b ' | b ' ž ā ā ā ā y ā [ ā b [ ~ ž ā y @ ž ā ' ā ý ā ā ā ā b ž ā b ā { ' b ā ā ž z \ ý y b ' ^ ā ā y ā z ā y @ ž ā ~ ^ ā ā ý ' b ž z ā y b ā y ā ā b ' & ž ā ē ā q ^ ā ā b \ z z ā b d ā ' ā ý ā \ z ' ā ā ā ž z ā ž ā ā ā ā ā b \ z z ā b ā ^ ā y ā ' ] y b ' ā ā ā d ā & y [ a ~ ā ý ā d ā ž ā ý \ @ y ā ž d ā ā ž ā ā y ā z ā ' ā ā ā y ' ā ā ē ā q ^ ā ā b \ z z ā b d ā ā b y ā ā d ā ā y Ÿ \ ā b [ a & ž & ý z @ d ā y ā \ & ā ' ā ý ž b ā ^ ā b ā ž ā ž @ ā ž & ~ ā \ ž z ā ā ā ā ā ā n y @ @ ^ ā ā ā u ā | ž ā b [ a & y [ a ž ā ý \ ā \ y ā ž d ā ~ ž @ & ' b d ā ý ā z ā ā ž d ā ^ ā b ā ā ž @ y b ž ā y ā [ ā ā y ] ' ā ā ā ý b ' | b [ ě

Ō y ] ' ā ā ā ā z z ā ' ā ž z ā y ā z ā ' ā ā ā y ā [ a y Ÿ b ā ^ ā ý ^ ž Ÿ ý ' ā ā ā y ā ^ ā b ā ž @ ā ~ ž @ ā ā ā b ā z ā y ā [ a y Ÿ b ā b ā y b ā ý y \ ā ž ā d ā ^ ā ý @ ž y b ž ā ā y ā @ ^ ā ā ā ā ā ý y \ ā ' ā ā d ā ~ ā [ ý ā ā ^ ā ý ž ā ā ^ ā ~ ā [ ā ' ý y ā ā ā y @ & ā b ā ā y ā [ a ~ ž @ ā ā ē ā ō y ] ' ā ā ā ' ā ý ā \ z z ā ā y Ÿ b ' ā ā ā ā ā ā ā ' b \ y b ' ā ā ā b ā y b ā ý \ ā z ā ^ ā ý @ ž y b ž ā ā y ā b ā ž ā \ ā z ā ^ ā z ā \ ā b ā ' ā ā & ž ā b y ā d ā ž & ^ b ' ā ā y ā d ā ^ ā ā ~ ā [ ā ' ý y ā z ā ' ā ý ^ & a ^ @ b d ā ž & ý y @ y ā ā & ž ā b d ā @ ' z ý \ ā ž d ā ^ ā ž ā z y ā ā ā ž & ž ā b ā { ā ž b ā ž @ ā ' ā b ž ā b ' ^ ā y ā d ā ā ^ ā ā \ ā d ā ^ ā ā y [ a ý ā ā ā ž ā b ē ā ō y ] ' ā ā ā ' ā ā y ā ā ā ý ^ ž Ÿ ý ' ā ā ā y ā ^ ā b ā ž @ ā ~ ž @ ā ā ā b ā ā | ' ā y b ž ā y ā [ a u ā | ž ā b [ a ~ ā ý [ ē ā r ý ] \ ^ \ ā ā ž } y & ~ ā ž ā ā ā ā y ] ' ā ā ā ' ā ý ā \ z z ā y \ b ā y @ ž ā ā b ā ā ' & ' b ž z ā b ā ā { ā ~ ~ ' ā ā d ā ý ž y b ' ā ā d ā ^ ā y @ y ā z ' ā ā ā ā ^ @ ž z ā ý y ā ' ā b ā ž ā ' ý ā ā ž } ~ ā ā \ ž ā b ā ā { ž y b ā ž @ ā ā ^ ý ž z ā ā ^ ā @ ž \* \ ' ž z ā ý ā ā ā \ & ~ b ' ā ā ā ā y ā [ ā ā ^ ā z d ā ā \* \ ^ @ d ā ý ž | ž ý ā ž d ā z @ \ ā d ā ^ ā y ā [ ā ā \ ý ā b y ā ý ž ā y ā [ a ý @ \ b y ā ā ^ ā ý @ \ ž ā b @ ž y b & ž ā b ā y ā z d ā y ā [ a y Ÿ b ' | b [ a { ā ' ý ā ā \ ý ā ž Ÿ b ā y ā [ ā ā b \ z z ā b ā ^ ā ā b ā ž @ ā ~ ž @ ā ā ā b ā ā @ ' z ý \ ā ž d ā & ž ā b y ā ā ā b @ ž ā ā d ā ^ ā ā \ ā z \ ž ā ~ ā [ ā ' ý y ā z ā z \ @ y ā ý ž ē

T b \ z z ā b ā d ā ā b y ā ā d ā ā ý y \ ā b [ a & ž & ý ž @ ā d ā y ā \ & ā ý ž ē ' ā y ā z ā y ā ā ā b ā ž @ ā ž & ~ ā \ ž z ā ā ā ā ō ā ā ā n y @ @ ^ ā ā ā u ā | ž ā b [ ā ā ā \ ā z ā ý ž ā y ā ž z @ b ā b ā ā ~ ā ā ā ý ž ā ā b \ y b ' ā ā ā d ā ý y @ ý \ & ā b y ā ý ž ā ā ^ ā ž | ž ā b ā ā { ā ' ý ā ā & ' ā ā b ā ' ā ý ā \ z z ā ā y ] ' ā ā ē

Ō ā ā y ] ' ā ā ā ^ ā ā y ā ā ž z ā ā y ] ' ā ā ā ā z ' ā ý ^ | ž @ ž z d ā ' ā | ā | ž z ā ā b \ z z ā b ā ā { ' ā ā ā ý ž ā ' ā ā ^ @ & ž z ā ý [ ā b ā ž ā z ' ā ý ^ | ž @ ' ā ā ā ~ ž @ ā ā ā ā ā b ā ž ā ~ @ ā ' ý b ' ^ ā ā ý ^ ā b y ' ā ž z ā ' ā ā ā ' ā ā ~ ā ý [ a y ā z ā { ' ā ā ā ý ž ā @ ž \* \ ' ž z ā b ā ^ ā z ā y ā ā ā y ] ' ā ā ā ý b ' | b ' ž ā ā ' & ž z ' y b ž ā [ ē ā ā ā ā ā y ] ' ā ā ā ý b ' | b ' ž ā ā & \ ā b ā y ž ā @ ž ~ ^ @ b ž z ā ' & & ž z ' y b ž ā [ ā b ^ ā b ā ž ā ā ž y ā ā ā t b \ z z ā b ā ā r ā ā ý ž ā y ā z ā b ā ž ā ā Ÿ ž Ÿ b ^ ā ā ā t b \ z z ā b ā ā ž y b ' | b ' ž ā ē

T b \ z z ā b ā ā | ' ā y b ž ā b ā ' ā ā ~ ā ý [ a ' ā ā ā ž [ a z ā ā ā b ā ž ~ ^ @ b ā ā ý ž z ā b ā ā ā ā y ] ' ā ā ā ^ ā ā b ž ā b ' y ā ā ā y ] ' ā ā ā b ā ā ž ā ā Ÿ ž Ÿ b ^ ā ā ā ā t b \ z z ā b ā ā ž y b ' | b ' ž ā ā ^ ā b ā ā b ā ž ā ā Ÿ ž y ā ā ā t b \ z z ā b ā ā r ā ā ý ž ē ā t b y ā ā d ā ā y Ÿ \ ā b [ a & ž & ý ž @ ā d ā ā b \ z z ā b ā d ā y ā z ā y ā ā ā b ā ž @ ā ž & ~ ā \ ž z ā ā { ā ' ā ā y ' ā ā b ā y Ÿ ž z ā ý [ ā b ā ' ā ā ~ ā ý [ a & y [ a ý ž ā ā \ ý ā ž Ÿ b ā b ā u ā | ž ā b [ a y ā z ē ā @ ā ā y b ' ā ā y ā ā ^ ā y ā ' ] y b ' ā ā ā z ' ā ý ~ ā ' ā y @ [ a y Ÿ b ' ā ā y ā z ā & y [ a ý ž ā ā ' ý ý ž ā ā ^ ā ý ] ' ā ā y ā z ā y @ ' & ā y ā ā ~ ž ā y ā b ' ž ā ā ' ā ā ý Ÿ ^ @ z y ā ý ž ā { ' b ā ā ā ž z z @ y ā d ā ā b y b ž d ā y ā z ā & \ ā ' ý ~ y ā ā y { ā ē

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~^á'Ÿ[DA & \ábAY'ŽA \ ážZA'áAYA & YááŽ@AbáYbAa \ @báŽ@āAbāŽAUá' | Ž@ā'b [ĥāA & 'āā' ^áÉ

Łá [AYŸŸŽāā^@A \ āŽA^a'āa^@ & Yb'^āAbŽŸāā^á'á [A@Žā^ \ @ŸŽāAbāYbāŸ'āā'ŸbāA { 'bāAbā'āAāā^@ & Yb'^āAbŽŸāā^á'á [A  
ŠŽā^ \ @ŸŽāAS^á'Ÿ [ĀĀS^á'Ÿ [ĀĀ@ĀĀÓPAS^á'Ÿ [ĀBA^@AYā [A^bāŽ@AUá' | Ž@ā'b [A~^á'Ÿ [A'āā^bAYŸŸŽ~bYŸ'āŽAYāZA { 'āāY'ŽA  
Ÿ^āā'ŽŽ@ŽŽAYA | 'ā'Yb'^āA^Abā'āAS^á'Ÿ [ĒAŁZZ'b'^āYāā [DAYā [AYŸb' | 'b [AbāYbā'ābŽ@aŽ@ŽāDA'ābŽ@@ \ ~bāDA  
Ÿ^ & ~^@^ & 'āžāDA^@AY^āā'ŸbāA { 'bāAbāžāāYāŽAYāŽAZā'Ÿ'žābA \ āŽA^aAÓPASŽā^ \ @ŸŽāA'āY'āā'ŽŽAYAY | 'ā'Yb'^āA^aA  
bā'āAS^á'Ÿ [ĒA'ā'āAS^á'Ÿ [ĀāāYāāAY~ā [Ab^AYāāAUāž@āA'áYā \ Z'āāDAŸ \ bā^ābā' & 'bŽŽAb^DAāb \ ŽžābāDAŽ & ~^á [ŽŽāA  
ĀaYŸ \ āb [AYāZAbYaaBDAá \ ŽābāDAYaa'ā'YbŽāDA | ŽāZ^@āAYāZA'āžž~žāžžābAY^āb@YŸb^@āĒAUāžA^aAÓPASŽā^ \ @ŸŽāDA  
Ž | ŽāA { āžāAYŸ@'ŽŽA^ \ bA^āAYA~@ | YbŽā [A^ { āžžAY^ & ~ \ bŽ@AbāYbā'āā^bA & YāYāžžA^@A & Y'ābY'āžžAY [AbāžA  
Uá | Ž@ā'b [DA'āAá^ | Ž@āžžAY [Abā'āAS^á'Ÿ [ĒA'ā'āAS^á'Ÿ [Āā \ ~Ž@āžžāAYā [Až] } 'āb'āā~^á'Ÿ ŽāAYāZ~@^ŸŽZ \ @ŸŽā  
bāYbAY@ŽA'āAY^āā'ŸbA { 'bāAbāžAbŽ@ & āA^Abā'āAS^á'Ÿ [Ē

**..15 : 7548 \***

pāŽA~ \ @~^āžA^aAbā'āAS^á'Ÿ [A'āAb^Ažāā \ @žAYāA'āa^@ & Yb'^āAbŽŸāā^á'á [A'āa@Yāb@ \ Ÿb \ @žAbāYbA~@^ & ^bžāAbāžA  
ŸYā'ŸA & 'āā' ^āAYāZA~ \ @~^āžA^aAbāžAUá' | Ž@ā'b [A'āAbŽŸYā'āāDAžY@ā'āāDAāž@ | 'ŸžDA@žāžY@ŸāYāZA  
YZ & 'ā'āb@Yb'^āDAYāZAb^Ažāā \ @žAY^ & ~^á'YāžZA { 'bāAYāāAY~ā'ŸYŸāžāY { āĒAObAYāāA~@^ | Žžāā^b'ŸžDAb^AYāāA { ā^A  
 \ āžAYāZA & YāYāžAÓPASŽā^ \ @ŸŽāDA^aAbāžAUá' | Ž@ā'b [ĥāAž] } ~žŸYb'^āāAYāZA@žA \ āYb'^āāĒ

**...185.7.9 4+ : 8 \***

Uāž@āAY@žA@žā~^āā'ŸāžA^@AbāžA~@^bžŸb'^āA^aAUá' | Ž@ā'b [AYāāžbāAYāZĥa^@AbāžAYŸŸ \ @YŸ [DA'ābžā@'b [AYāZA  
Ÿ^āā'Žžāb'Yā'b [A^aAbāžA'āa^@ & Yb'^āAb^A { ā'ŸāAbāž [ĀAY | ŽAYŸŸŽāāĒAUāž@āAY@žAž} ~žŸbžžAb^A \ ~^á'ā'ZAbāžA  
ābYāZY@ZāAYāZA~@'āŸ~āžāA^aAbāžAUá' | Ž@ā'b [A { ā'žā \ ā'āāAÓPASŽā^ \ @ŸŽāĒAŁŸŸ^@Z'āāā [DA \ āž@āAY@žA~@^a'ŸbžžA  
a@^ & A \ ā'āāAYā [A~^@b'^āA^aAÓPASŽā^ \ @ŸŽāAb^A~ābA^@Ab@Yāā & 'bAYā [A'āa^@ & Yb'^āDAŸYbYDAbž] bDAa'āžDAā'āāDA  
ā^ab { Y@žDAŸāYbDAŸ^ & \ ā'ŸYb'^āA^@Abāž@AY^ābžābAbāYbā'āāAY@ & a \ āDAYŸ \ ā | ŽDAZ'āŸ@' & 'āYb^@ [DA^āb'āžDA  
Ÿ^ & ŸYb' | ŽDAbā@žYbžā'āāDA'āā \ āb'āāDAž & ŸY@Yāā'āāDA^Y@Yāā'āāDA'āb' & 'ZYb'āāDAžāY & Yb^@ [DA~^@ā'á@Y~ā'ŸDA  
^ŸāŸžāžA^@A { ā'ŸāAžāYb' | Žā [AYāāžŸbābāžAUá' | Ž@ā'b [DAYā^bāž@AUāž@DA^@AYā [Abā'@ZA~Y@b [ĒAUāž@āA { ā^AZA  
ā^Ab@žā~žŸbAbā'āAT~@'bā^aAUāžA & Y [AYžAāžāZā'āA | 'ā'Yb'^āA^aAbā'āAÓPAS^á'Ÿ [Ē

**. ; | ) \* +.3.9.438**

& | ) ? R ? É A

¡ 541. (> \*1&' 47&9.43

&¡ &AACQQÉÁĽŸŸŽāāAb^Aā^&ŽĀŌPĀŠŽā^ \ @ŸŽāā^āA@Žāb^ŸbŽZAb^Aā~ŽŸ'aŸA~^ā'b^āāA^@A \ ābāYāA  
ZŽbŽ&'āZZAY [AbāŽAY~@^~@ŸbŽAa \ āŸb^āŸA \ ā'bāāŽYZÉACE \ āŸb^āŸA \ ā'bāāŽYZāāā^ \ āZAZŽbŽ&'āŽA  
YāZAY \ bā^@'] ŽābāŽAY~@^~@ŸbŽAZŽā@ŽZ^A^AYŸŸŽāāA^@AŽŸŸāA&Ž&ŸŽ@A^AbāŽ^@A \ ā'bāDAYāZāā^ \ āZā  
~@^| ŽZĀ \ ā'bA&Ž&ŸŽāA { 'bāAYZZ\* \ ŸbŽA^@ ŽābŸb^āAYāZAb^Y'ā'āāA@ŽāY@Z'āāAbāŽAY~@^~@ŸbŽĀ \ āŽA  
^aAYāāŌPĀŠŽā^ \ @ŸŽāÉAUA'āāŌPĀŠŽā^ \ @ŸŽā^ \ bā'ZŽA^AbāāŽāŸ^~ŽA^AYŸŸŽāāA^YābŽZAY [AbāŽA  
Uā | Žā^b [A^@AYbbŽ&~b^āāAb^AŽ} ŸŽZĀ@Žāb^Ÿb^āāA^āAYŸŸŽāā^āAYāāŽ^ \ ^ \ āA | ^āŸb^āA^Abā^āAS^āŸ [A  
YāZA & Y [A~^bŽāb^Yāā [AbŽYZAb^AY@' &'āŸA~@āŽŸ \ b^āÉ

' ¡ 9CAFLGA?J ?LB (MLRCLR' ?QCB 7CQRPGARGMLQÉA pāāŽAUā' | Žāā^b [A@ŽāŽ@ | ŽābāāŽA^'āābAb^A  
' &~āāŽAbŽŸāā ŸŸA@Žāb^Ÿb^āāA^āAbāāŽAYŸŸŽāāAb^A'bāāāŽb { ^@āA'āA { Y [āAbāYbA & Y [AZ'ā@ \ ~bAbāŽA  
YŸ'āb [Ab^A \ b^ā'] ŽŸŸŽ@bY'āAZŽ | ŸŽāDA~@^ā@Y & āDAYāZA~@^b^Ÿ^āāÉAŁZZ'b^āŸā [DAbāŽAUā' | Žāā^b [A  
Ž}~@Žāā [A@ŽāŽ@ | ŽābāāŽA^'āābAb^A' &~āāŽAY^ābŽābÉYŸāŽZĀ@Žāb^Ÿb^āāA^āAbāŽA \ āŽA^a'bāŌPĀ  
ŠŽā^ \ @ŸŽāÉAT \ ŸA@Žāb^Ÿb^āāA & Y [AYŽAāŽŸŽāāY@ [Ab^A~@^bŽŸbAbāŽAUā' | Žāā^b [AYāZA bāA  
Ÿ^āāb^b \ ŽābāÉA pāāŽAUā' | Žāā^b [A@ŽŸ^āā'] ŽābāYbAYŸŸZŽ &'ŸA@ŽZŽ^ & AYāZAbāāŽZŽ^ & A^a'ā\* \ @ [A  
Y@ŽA' &~^@bYābA | Yā \ ŽāAbāYbA & Y [AYŽAā'āZŽ@ZZAY [AYāA^ | Ž@] ŽŸā^ \ āA@Žāb^Ÿb^āA^AY^ābŽābÉ  
pāāŽ@Žā^@ŽDAYā [AY^ābŽābÉYŸāŽZĀ@Žāb^Ÿb^āāŸāŽ&ŽA' &~āāŽZĀ^āŌPĀŠŽā^ \ @ŸŽāA { 'āāA@Ž\* \ @ŽA  
Y~@^~@ŸbŽĀŸŸAS@Žā'ZŽābAY \ bā^@'] Ÿb^āÉ

( ¡ &AACQQ (MBCQÉAUāŽ@āA & \ āAbYāēŽA~@ŽŸŸ \ b^āāAb^A~@Ž | ŽābA \ āY \ bā^@'] ŽZĀ \ āŽA^AbāāŽ^@A  
YŸŸŽāāAY^ZŽāA~Yāā { ^@ZāBÉAUāŽ@āA { 'āāŸŽāāŽāZAYŸŸ^ \ ābYŸāŽA^@AYāāAYŸb^āāA~Ž@a^@ & ŽZĀ  
 \ āZŽ@AbāāŽ^@AYŸŸŽāāAY^ZŽāDA'āŸā \ Z'āāAbā^āŽA~Ž@a^@ & ŽZAY [A^bāŽ@'āZ' | Z \ YāāAYāYA@Žā \ ābA^aA  
āŽā'āāŽāŸŽA'āA~@^bŽŸb^āābāŽAY^ZŽāÉ

) ¡ 5PQT?AWÉAUāŽ@āAY@ŽA^Ÿā'āYbŽZAb^A@Žā~ŽŸbAbāŽA~@' | YŸ [AbāYbA^bāŽ@AUāŽ@āAY | Žā'āAbāāŽ^@A^ { āA  
ā [ābŽ&āDĀNŸbYDAYāZAYŸŸ^ \ ābāÉA pā \ āDA'ba'āAYA | ^āŸb^āA^Abā'āAS^āŸŸ [Aa^@AYā [AUāŽ@Ab^AŽāāYāŽA'āA  
ŽāŽŸb^ā'ŸAāā^~'āāDĀA^@Ab^AŽ &~ā^ [AŌPĀŠŽā^ \ @ŸŽāA^@AbāāŽA~ \ @~^āāŽA^aA~@ [ 'āā'āb^āAbāāŽAYāY'@āA^aA  
^bāāŽ@āDA'ÉŽÉDAb^AYŸŸŽāāA^@AYbbŽ&~bAb^AYŸŸŽāāAŽāŽŸb^ā'ŸA'ā'ZāDA^@Ab^A'āābYāāÉ \ b^ā'] ŽA' & YāŽÉY \ Z^A  
@ŽŸ^@Z'āāAZŽ | ŸŽāDA { 'bā^ \ bA~@^~@Ÿ@AY \ bā^@'] Ÿb^āAb^AZ^āA^aA^@AāŽā \ āŽAY \ ā'āāāA~ \ @~^āāŽA^aA  
bāāŽAUā' | Žāā^b [É

UāŽ@āAā^ \ āZAYŽAY { Y@ŽAbāYbAbāŽAUā' | Žāā^b [AYŸāā^bA \ Y@YābŽZAbāāŽāŸŸ \ @'b [AYāZA~@' | YŸ [A^aŌPĀ  
ŠŽā^ \ @ŸŽāDAYāAbāāŽ^@A \ āŽāA & Y [Aā^bAYā { Y [āAYŽAY^ &~āŽbŽā [A~@' | ŸbŽÉACE^@AŽ} Y &~āZDA'āā \ YāŸŽA^aAYA  
~Yāā { ^@ZĀ^@A^bāŽ@A & ŽŸāāA^AYŸŸŽāā^'āAb^AYāā \ @ŽAY~@^~@ŸbŽAY^āa'ZŽāb^Yā'b [A^aUA' | Žāā^b [EA  
@ŽāYbŽZĀ'āa^@ & Ÿb^āAYāZāA'āŽāÉAŌbAZ^āA^Abā \ Y@YābŽZĀ~@' | YŸ [A'āAYāāAYŸāāZāDAŽā~ŽŸŸā [Aa^@A  
~Ž@ā^AYāA^ \ āāY { a \ āA \ āŽA^aŌPĀŠŽā^ \ @ŸŽāÉA pāāŽAUā' | Žāā^b [A & Y [A & ^ā' b^āŌPĀŠŽā^ \ @ŸŽāAb^A  
Žāā \ @ŽAbāYbAbāāŽ [AY@ŽāāŽŸ \ @ŽAYāZAYŽ'āā \ āŽZĀ'āAY^āa^@ &'b [A { 'bābā'āŌPĀS^āŸ [AYāZAbāāŽ@A  
b \ @ŸŽāDA & Žā' AZ^Ž a^A^a

Ÿ^ää'äbŽâbA { 'bâAbâŽAUâ | Ž@ã'b [ĤâATŽâã'b' | ŽAÑYbYAÀATŽŸ\@'b [AS^à'Ÿ [DAUSE ÎÉËËÉÉÁP^AbâŽAŽ }bŽâbA  
bâŽ@ŽA'âAYâ [A \ áŸŽ@bY'áb [AYâAb^A { âŽbâŽ@AYâ [AÑYbYAŸ^âãb'b \ bŽâATŽâã'b' | ŽAÑYbYDA'baââYââYŽA  
b@ŽYbŽZAYâATŽâã'b' | ŽAÑYbYA \ âb'âYAZŽbŽ@ & 'âYb'^âA'âA & YZZÁY [AbâŽANÔRAYâZACE \ áŸb'^âYâAUâ'bA  
âŽYZDA'âAY^âã \ âbYb'^âA { 'bâAbâŽAUâ | Ž@ã'b [ĤâARaa'ŸŽA^aOŽáYâAŁ.aaY'@âÉ

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- I 2 ? JGAGMSQ 8MDRU?PCÉAòbA`āAbāŽA@Žā~^āā`Ý`ā`b[A^aAYāāUāŽ@āAb^AbYæŽAY~~@^~@`YbŽA

3i 8?LARGMLQÉACEY'á \ @ŽAb^AYZáŽbŽAb^AbáŽáŽA~^á'Ÿ'ŽáAYáA@Žā \ abA'áAbáŽāā \ ā~Žāā'áA^aAŌPA  
ŠŽā^\@ŸŽāA~@'|'áŽáŽáDAZ'áŸ'~á'áY@[AYŸb'^ááAYáZA~@^áŽŸ\ b'^áA \ áŽŽ@AabYbŽAYáZAaŽŽŽ@YááY { āA  
{ áŽáAY~~á'ŸŸáŽÉAPáŽAUá'|Ž@ā'b[A&Y[A@Žāb@'ŸbA^Aā\ā~ŽáZAUāŽ@A~@'|'áŽáŽā~ŽáZ'ááA  
'á|Žāb'áYb'^áAYáZAZŽbŽ@&'áYb'^áA^aAbáŽAYāāŽáŽZA|'áYb'^áAāBÉAŌāAbáŽāŽ|ŽābA^aA@Žāb@'Ÿb'^áA^@A  
ā\ā~Žāā'^áA^aAŌPAŠŽā^\@ŸŽāA~@'|'áŽáŽáDAYA@ŽŸá^áYŸáŽāŽā^@bA { 'āáY'ŽA&YZZAb^A  
YŸY^& ^ZYbŽAbáŽAYŸYZZ & 'ŸAŌPAŠŽā^\@ŸŽāAāŽŽZāA^aAbáŽAUāŽ@AZ\@'ááAbáŽA'á|Žāb'áYb'^áÉA  
Uá'|Ž@ā'b[AáYáYb'^ááAY@ŽA' & ~^áŽZAY[AbáŽAY~~@^~@'YbŽAUá'|Ž@ā'b[AY\ b^á^@b[AYáZA&Y[A  
'áŸá\ZZA@Ž' & Ÿ\@āŽ&ŽābAb^AbáŽAUá'|Ž@ā'b[Aa^@AbáŽAŌPAŠŽā^\@ŸŽāDAāŽ@|'ŸŽāAYáZA~Ž@ā^áāŽāA  
ŸaY@áŽā'áŸ\@ŽŽA'áAZŽbŽŸb'ááAYáZA~@^|'ááAbáŽA|'áYb'^áAYāA { ŽāáYāAa@^&AbáŽA|'áYb'^áA  
'bāŽāÉAŠŽ' & Ÿ\@āŽ&ŽābA&Y[A'áŸá\ZZAY^&~ŽāáYb'^áAa^@AābYaaA { ^@aeAb' & ŽA@ŽáYbŽŽAb^AbáŽA  
|'áYb'^áAYáZAa^@AY'á'|'ááA'áa^@&Yb'^áA@ŽáYbŽŽAb^AbáŽA'áŸ'ZZābÉ

4i 3ML^ < ?GTCPEÁL\_AaY'á \ @ŽAb^AZāa^@ŸŽAYá[A~@^|'á'^áA^aAbá'áA~^á'Ÿ[AZ^Žāā^bAŸ^āāb'b\bŽAYA { Y'|Ž@A  
^aAāY'ZA~@^|'á'^áA^@AYáA' & ~á'ŽZAZáZ^@āŽ&ŽābA^aAYá[AYŸb'|'b[AbáYbA { ^\áZA^bāŽ@ { 'āŽAY^áāá'ŸbA { 'bāA  
bā'áA~^á'Ÿ[É

# 8CLQGRGTC ) ?R? ?LB 8CASPGRW 5MJGAW

.i 541. (> 89&9 \* 2 \* 39

pāŽAYŸ'á'b[Ab^AY^āāŽŸbAYáZA~@^ŸŽāā'áa^@&Yb'^áAa^@AYZ&'á'āb@Yb'|ŽAYáZAYŸYZZ&ŸA~\@~^āŽā'áAY@'b'ŸYáAb^A  
bāŽAUá'|Ž@ā'b[áA&'áā'^áÉAŌāa^@&Yb'^áAY^āāŽŸbŽŽAYáZA~@^ŸŽāāŽZA&Y[A'áŸá\ZZA~Ž@ā^áAYá'áa^@&Yb'^áA  
@ŽáY@Z'ááAāb\ZZābDāŽ&~á^ [ŽŽāA^@AYá \ & á'ÉAUāŽ@āA^~Ž@Yb'ááA^@A\b'á']'ááAŌNUAŸ^&~\b'ááA@Žā^\@ŸŽāAY@ŽA  
@Žā~^áā'ŸáŽā^@A&YáYá'ááAYáZA&Y'ábY'á'ááAbáŽāāŽŸ\@'b[A^aAbáŽAZYbYDAŸ^&~\b'ááA@Žā^\@ŸŽāAYáZA

( I SšZYžA@žAž@Ab^A0āa^& Yb^'āAbžYāā^ā[AŠžā^ \ ŸžāAS^ Ĩ [Aa^@AYāa^bāž@A  
Zžā'ā' b^'āāĚ

. ; I 541. (> \* 1& ' 47&9.43

&I +SLARQML?J : LGR 7CQNMLQ@GJGRWÉACE \ aYb^'āAYa \ ā' bAāžYZāAY@žA@žā~^āā' YāžA^@A  
' & ~āž & žāb' āāAY ~^@~@ \ YbžA & YāYāž@' YāDA^~ž@Yb^'āāDA~ā [ ā' YYāDAYāZAbžYāā' YāY'āb@^āāAa^@A  
YŸYžāāAb^DA \ āžA^aDAb@Yāā & 'āā' ^āA^aDAYāZAZ' ā~^āYāA^aZYbYā' āAY^& ~ā' YāYžA { 'bāAbā' āAS^ā' Y [ÉAbā' āA  
@ž\* \ 'ž & žābā' āāžā~ž' Yāā [A' & ~^@bYābAa^@Abā^āžY^& ~\ b' āā@žā^ \ ŸžāAbāYbAā \ ~^@bA^@Aā^ābA  
Y^'b' YŸYāY \ ā' āžāāA \ aYb^'āāA^@ATžāā' b' | žAŸYbYĚ

' I 8CLQGRGTC ) ?R?ÉAT^ & žAž } Y & ~āžāA^aTžāā' b' | žAŸYbYā' āYā \ ZžIā^Y' YāāžY \ @' b [A \ & Yž@āDA  
Z@' | ž@A' YžāāžA \ & Yž@āDAY@žž' bAYY@Z^@A^bāž@Aa' āYāY' YāAYŸY \ ābA \ & Yž@āDAÓNUAÓŸAā \ & Yž@āDA  
~^@bžYbžžAāžYābāA' āa^@ & Yb^'āāDA' āYāY' YāZYbYDAžž \ ŸYb^'āYāA@žY^@ZāDA' ābžāžYb \ YāA~@~ž@b [A^@A  
@žāžY@YāA@žY^@ZāDAZ^ā^@A~@^a' žāDA^@AYā [A' āa^@ & Yb^'āAbāYbAY^ \ āZ@žā \ ābA' āAYA & Ybž@' YāA@' āāA^aA  
' Zžāb' b [AbāžAbDAYA | ^āYb^'āA^aACEOŠSŁ DAÓŠSŁ A^@AÓÓMŁ DA^@A^bāž@ { 'āžāY@ & AbāžAžā' b' & YbžA  
ā' āYāY' YāYāZāž~ \ bYb^'āYāA' ābž@žābA^aAbāžAUā' | ž@ā' b [A' aA \ āY \ bā^@' ] žžAYŸYžāā' āA~ž@ & 'bbžžDA  
{ āžbāž@A' ābžāb' āYāā [A^@A \ ā' ābžāb' āYāĚ

( I 8CASP 8RMP?ECÉATžY \ @žAāb^@YāžA' āAY | Y'āYŸžA' āAUā' | ž@ā' b [A~@^ | 'žžāāžb { ^@āAYbbYŸYāžžA  
āb^@YāžIāžÉāÉDAÁREZ@' | žÁBÉAŁ āāATžāā' b' | žAŸYbYā' āAb^AYžAAb^@žžAž' bāž@A^āAbāžāžb { ^@āAYbbYŸYāžžA  
āb^@YāžA^@A { 'bā' āA^bāž@AY \ bā^@' ] žžA' āāb' b \ b' āYāžāž@ž~@' āžāā [ ābž & āāžÉāÉDAMYāāž@DAŁ.Z' @^āZYŸāDA  
žbYÉBÉATb^@YāžA' āAYASNDāž' bāž@AUā' | ž@ā' b [A^@ { āžžA^@A~ž@ā' āYā' āA^āY^' āā' žž@žžAžY \ @žA  
 \ āžāāAbāžAAY@ZAZ@' | žA' āA~@~ž@ā [AžāY@ [~bžžĚ

) I ) MULJM?BGLE ?LB 9P?LQNMPRGLEÉATžāā' b' | žAŸYbYā & Y [Aā^bAYžAZ^ { āā^YžžAb^@A  
b@Yāā~^@bžžA^āAYā [AS^@bYŸYāTb^@YāžAŸNž' | YžAYāZAPžžYÉAbā' āAY~~ā' žāAb^AY^bāA^āÉYŸY & ~\ āA  
YāZAA^aEYŸY & ~\ āAZ^ { āā^YZ' āāAYāZAb@Yāā~^@bYb^'āÉAŁ āā^ābžžA' āAbā' āAS^ā' Y [DAžžY \ @žāžb { ^@āAYbbYŸYāžžA  
YbbYŸYāžžAāb^@YāžA' āA~@^ | 'žžAa^@Abā' āA~ \ @~^āžÉATžāā' b' | žAŸYbYā & Y [AYžAZ^ { āā^YžžAYāžÉ^@A  
b@Yāā~^@bžžA^āā [A { 'bāA~@^@A { @' bbžžAY^' āāžābA^aAbāžAY~@~@' YbžAÚ' YžAS@žā' žžābÉAbā' āAY^āāžābA  
{ 'āA^āā [AYžAā@YābžžA^āAYAbž & ~^@Y@ [DAŸYāžÉY [EAŸYāžAYā' āĚ

\* I : QC MD 2CBG? MP \* OSgNKCLRÉAUāž@āAY@žAb^AYŸYžāāAUā' | ž@ā' b [A' āa^@ & Yb^'āA^āA  
Uā' | ž@ā' b [EA^ { āžžA & žž' YA^@Až\* \ '~ & žābÉAŁ āā' āa^@ & Yb^'āāAb^@žžA^āAUā' | ž@ā' b [A^@ { āžžA  
ž\* \ '~ & žābDA' āYā \ Z' āāAY \ bAā^bAā' & 'bžžAb^ASNDāāž@ | ž@āDAYāZāāžb { ^@āAYbbYŸYāžžAāb^@YāžDA' āA  
Y'āā' žž@žžAbāžA~@~ž@b [A^AbāžAUā' | ž@ā' b [ÉAUāž@āAY@žAā^bAb^Aāb^@žDAŸ^ & \ ā' YbžDAb@Yāā~^@bDA  
^@A~@^YžāāAUā' | ž@ā' b [A' āa^@ & Yb^'āA^āA~ž@ā' āYāā [A^@ { āžžA & žž' YDAžž' | YžāDA^@AY^& ~\ bž@āA  
{ 'bā \ bA~@^@A { @' bbžžAY~@^ | YāAa^@ & AbāžAY~@~@' YbžAÚ' YžAS@žā' žžābAYāZAbāžAY~@^ | YāA^AbāžA  
~ž@ā' āYāžž\* \ '~ & žābAY [A0āa^@ & Yb^'āAbžYāā^ā [ATž@ | 'YžāAĀÓPTBÉA0āa^@ & Yb^'āA^āAUā' | ž@ā' b [A  
^@ { āžžA~^@bYŸYāžž' | YžāA \ YāAYāAāYāāZ@' | žāDAZ' āāDA^@AAY~b^~AY^& ~\ bž@āA & \ ābYžAāb^@žžA' āA  
~ā [ā' YŸYā [AāžY \ @žAā^Yb^'āāAYāZ & \ ābAā^Ab^AYžAb@Yāā~^@bžžA { 'bā \ bAžāY@ [~b' āāAbāžAYbYā  
 \ ā' āāAUā' | ž@ā' b [AY~@^ | žžAā^Ab { Y@žAYāZAbžYāā' \* \ žāĚ

+I \* LAPWNRGMLI T^Ab { Y@žDA~^ā' Y'žāDAYāZ~@^Yžž \ @žAa^@AžāY@ [~b' āāATžāā' b' | žAŸYbYāY@žA  
Y \ @žābā [AYž' āāAZž' | žā^~žžAYāZAZž~ā^ [žžAY [AbāžAUā' | ž@ā' b [ÉAŸ \ žAb^AbāžAāY^~žA^Abā' āA { ^@āAYāZAbāžAYāYāā' āāāYb \ @žA^AbžYāā^ā^ā [A' ā' | žāb^@ [DAbāžAZž~ā^ [ & žābA^aAžāY@ [~b' āā' āAYāA  
āāā' āāA~@^YžāāĚ

, i 4FGM 'PC?AF 3MRGDGA?RGML &ARi pãŽARá'^AM@ŽYŸaAQ^b'a'ŸYb'^ãAŁ.YbA@Ž\* \ 'ŽãA~@^&~bA  
ã^b'a'ŸYb'^ãAb^A'ãZ'|'Z\YããA {ã^ãŽA~Žã^ãYãA'ãa^@&Yb'^ãAãYãYŽãAŽ}~ãŽZA'aAbãŽA'ãY'ŽãbA  
Ÿ^ \ãZAãŽYZAb^Aa@Y\ZA^@A'Žãb'b [AbãŽabÉAŁ.ã [Aã^ããA^aATŽãã'b'|ŽãŸYbYDAZ'ãYã^ã \ @Žã^aATŽãã'b'|Žã  
ŸYbYAb^A\ãY\bã^@' ]ŽãA'ãZ'|'Z\YããA^@Aã \ã~ŽYbŽãA&'ã \ãŽã^aATŽãã'b'|ŽãŸYbYA& \ãbAYŽã  
'& &ŽŽ'YbŽã [A@Ž~^@bŽãAb^AbãŽARaa'ŸŽã^aAbãŽãNÔRÉ

-i 'PC?AF MD RFGQ 5MJGAWi Ú'^ãYb'^ãA^aAbã'ãAS^ã'Ÿ [A { 'ããYŽã | Ž { ŽãYããYããŽ@'^ãAZ'ãY'~ã'ãY@ [A  
^aaŽããŽAYãZA { 'ããYŽãYZZ@ŽããŽãAbã@'^ããAbãŽãY~@^~@'YbŽãÚ'ŸãS@Žã'ŽãbAYãZAbãŽãRaa'ŸŽã^aA  
Ô \ &YããŠŽã^ \ @ŸŽãÉAÚ'^ãYb'^ããA^aAbã'ãAS^ã'Ÿ [A & Y [AãŽYZAb^AZ'ãY'~ã'ãY@ [AYŸb'^ãA \ ~Ab^AYãZA  
'ãYã \ Z'ããZ'ã & 'ããYãDAŽ}~ \ãã'^ãDAYãZÉ^@AãŽãYãYŸb'^ããAN \ @@ŽãbACE \ãYb'^ãYãAUã'ãã~@YŸb'ŸŽã^@A  
~@^ŸŽã \ @ŽããããYããAYŽãZY~bŽãAb^AY^&~ã [A { 'bãAbã'ãAS^ã'Ÿ [É

**.39 \* 75 \* 7843&1 ; .41 \* 3 ( \* 541.( >  
&i 5MJGAW**

âY&ŽËÿÿää'ááDAÝŽá'bbá'ááDAbâ@ŽYbŽá'ááA|'âŽáÿŽDAâbŽÿá'ááA&^âŽ[DAZZâb@^['ááA~^ââŽâá'^ââDA  
'â^âYb'ááDA^@Aÿ^&&'bb'ááAâŽ}\YâA|'âŽáÿŽËÁŠŽáYb'âââ'~A|'âŽáÿŽAÿÿA^ÿÿ\@AÝŽb{ŽŽáAÿÿá\YâA^@A  
'âb'&YbŽA~Y@bâŽ@âA^aAbâŽAâY&ŽA^@A^~^â'bŽAâŽ}DAa^@&Ž@A~Y@bâŽ@âDA@^&&YbŽâDA^@AaY&'â[A  
&Ž&ÿŽ@âÉ

**8R?JIGLE** 'âAÿA~YbbŽ@âA^aAb{^A^@A&^@ŽA'áÿ'ZZâbâA^aA\â{YâbŽZAYbbŽâb'^âDAâY@Yââ&ŽâbDAÿ^âbYÿbDA^@A  
^bâŽ@Aÿ^âZ\ÿbAZ'@ŽÿbŽZAYbAYââ~Žÿ'a'ÿA~Ž@â^âAbâYbA{^âZAYÿ\âŽA@ŽÿA^âYÿâŽA~Ž@â^ââAb^AaŽY@AâY@&A  
b^AbâŽ'@A~â[â'ÿÿâAâŽÿâbâDA&ŽâbYâA^@AŽ&^b'^âYâAâŽÿâbâDAâYâŽb[DAa@'ŽâZâDAaY&'â[A^@A~@^~Ž@b[É  
TbYâæ'ááA&Y[A'âÿâ\ZZDAÿ\ba'âAâ^bAâ'&'bZZAb^DAbŽâŽ~â^âŽAÿÿââDAbŽ}ba&ŽââYá'ááDAâ^ÿÿYâAâŽb{^@æ'ááDA  
'ââbYâbA&ŽââYá'ááDA&^â'b^@'ááAÿŽâY|^@DAÿŽ'ááA'âA~â[â'ÿÿâA~@^}'&'b[Ab^AbâŽA~Ž@â^âDA^@AbYæ'ááA  
~ÿb\@ŽâÉ

**8CVS?J - ?P?QQKCLR** &ŽÿââAÿá[A\â{Žáÿ^&ŽAâŽ}\YâAYZ|YâÿŽâDA@Ž\*\ŽâbâAa^@AâŽ}\YâAaY|^@âDA



āž} \ YāYŸb' | b [ÉAT' & aY@ [DA~Yābāž} \ YāY'āāžābAZ'žāā^b' & ~ā [Aa \ b \ žAŸ'āāžābÉ

( ?N?AGRW DMP ( MLQCLR

'S ŌāŸY~YŸ'bYb'^ā'āAZZ'a'āZZAYāYŸ'āā'āAYāAbYbZā'ā { ā ŸāYA~žāā^āā \ aa Ÿ'žābā [AāŸŸāābāžA Ÿ'āā' b' | žAYŸ'ā' b [Ab^A@žYā' ] žAbāYbAbāžā' b \ Yb'^ā'āāž} \ YāDA^AŸYāā^bAY~žŸ'YbZā Ā@Yb'^āYāā [AYāZ@žYā^āYŸā [BAbāžāYb \ žAYāžÉ^Až} bžābA^AbāYbāā' b \ Yb'^āÉ

(S N^āāžābAYāA^ā [AYžAá | žāY [Abā^āžA { 'bāAYY~YŸ'b [Ab^AY^āāžābÉA P'ā^ā [^ \ āāž@ bāYāÉHAZ^A^AbāY | žAbāžAYY~YŸ'b [Ab^AY^āāžābAb^Aāž} \ YāAYŸb' | b [ÉACE^AYZ \ ābāDAŸY~YŸ'b [Ab^A Ÿ'āāžābā' āA^āAYāYāžAY [AYŸāžAYā' āÉA PžābYāā [AZ'āYŸāžZA~žāā^āāYāZA~ā [ā ŸYāā [A 'āŸY~YŸ'bYbžZA~žāā^āā & Y [A^AbāY | žAbāžAYY~YŸ'b [Ab^A^ | žAY^āāžābÉARāžA & Y [AYžA 'āŸY~YŸ'bYbžZAbž & ~^@Y@'ā [AYāYA@žā \ ābA^aA & žābYāā āāžāāDA \ āŸ'āāŸ' \ āāžāāDA^AYāYA @žā \ ābA^aAYāŸ'ā^ā^A^bāžAZ@ \ āŸ'āā \ & ~b'^āÉ

)S RāžA & Y [A^AbāžāYāžA'āāž} \ YāAYŸb' | b [A { 'bāAYābāž@A~žāā^ā { āžāāžAāā { āA^AāYāA @žYā^āYŸāžAYŸāžAb^AYžāž | žAbāYbA~žāā^Ab^AYžā' āŸY~YŸ'bYbžZAž \ žAb^AYāŸ'ā^ā^A^bāž@A Z@ \ āAY^āā \ & ~b'^āA^A^bāž@A@žYā^āāÉA bYāžā'āAY^ābž} bDAā^ & žA'āžŸYb^ā^A^A^āāŸāžA 'āŸY~YŸ'bYb'^āA & Y [A'āŸā \ žžDAY \ bAY@žāā^bāā' & 'bžAb^AbāžAāā { 'āāĪA \ & 'b'āāDAā \ @žZA ā~žžYāDAžžŸ@žYāžZA & ^b^AAY^@Z'āYb'^āDA \ āŸ'āāŸ' \ āāžāāDAžž@Yb^Yā^Až} bž & žAYžāY | ^@DA āā { āžžāžA^a~žāā^āāŸ'āā \ & ~b'^āDA^AYā^Ažāā^bāž | žāÉ

( MCPAGML

N^āāžābA { ā Ÿā'āA^Yb'āžZAbā^ \ āābāžA \ āžA^aA@Y \ ZA^@A^@ŸžDA { āžbāž@AY [A~ā [ā ŸYāAa^@ŸžDA bā@žYbāDA'āb' & žYb'^āA^A^AY^Až@Ÿ'āā'ā'ā | YāžÉ

( I &NNJGA?@GJGRW

pā'āA~ā'Ÿ [AY~ā žāAb^AYāāAŌ^āāANY@^āāUā' | ž@'ā' b [Aāb \ žžābāÉA \ āāāb \ žžābāAY@žāžāŸ' \ @YāžžAb^A @ž~^@bAYāāžāžZA'ābž@~žāā^āYāA | ^āžāŸA^āāžāāžāāYāA^āāŸ'āžAŌābž@~žāā^āYāA | ^āžāŸA ^āāžāāžāA & Y [AYžA@ž~^@bžZA { āžbāž@Abāž [A^AYŸ' @žžA^āAYŸ & ~ \ āDAYbAYUā' | ž@'ā' b [Aā~āā^āžZA ž | žābDA^A^āAYŸ & ~ \ āA'āŸā \ ž'āāāb \ ž [AYŸ^AYZDA'ābž@āāā~āDAYāZ' & & ž@'ā' āāž} ~ž@žāŸāÉ

) I ( MLDBGCLRG?JGRW ?LB 7CNMPRGLE

p^AbāžAž} bžābA~āā ŸāžDAbāžAUA' | ž@'ā' b [A { 'āāA & Y'ābY'āAbāžAY^āā žžāb'Yā' b [A^aYāā~Y@b'žāā'ā | ^ā | žžA'āA YāāžāžZA'ābž@~žāā^āYāA | ^āžāŸA^āāžāāžāāAN^āā žžāb'Yā' b [DAā^ { ž | ž@DAYŸāā^bAYžA \ Y@YābžžžÉA Uāžž@ARā'āY { DA~žāā^āā { ā^Aāā { AbāYbAYāāžā^ [AāYāŸžžāAY^ & 'bbžZA & \ āb@ž~^@bAbāYbA 'āA^ & Yb'^āAb^AāY { Ažāa^@Ÿž & žābÉACE^AbāYbA@žYā^āDAYāāUā' | ž@'ā' b [Až & ~ā^ [žžāāž} Ÿā \ ž'āā' ŸžāāžZA ~^@āžāā'āYāāA^ & AbāžAUA' | ž@'ā' b [AN^ \ āāž'āāANžābž@AYāZA~Yāb^@YāŸ' \ āāžā^āANŸžÉA~@žābā YŸb'āāAYāA~Yāb^@YāŸ' \ āāžā^@āXBA & \ ābAY^ & ~ā [A { 'bāAbā'āA~ā Ÿ [ÉAbāž@žā^@žDAž & ~ā^ [žžāA & \ ābA Ÿ^ābYŸbAŌ^āāANY@^āāS^ā ŸžANž~Y@b & žābA^@AbāžAUA' | ž@'ā' b [AŌž'āābāS^ā ŸžANž~Y@b & žābA { āžāYāA YāāžāYb'^āA^AYāA'ābž@~žāā^āYāA | ^āžāŸA^āāžāāžāYāAYžžA & YžžÉ

Tb \ žžābāA { ā^Až} ~ž@žāŸZā'ābž@~žāā^āYāA | ^āžāŸAYŸYā & žžbA { 'bābāžAS^ā@Y & AN^@Z'āYb^@Aa^@A bāžAUA' ^āžāŸZASž | žāb'^āAYāZā \ Ÿb'^āANžābž@Ab^AZ'āŸ \ āāAYāā' b \ Yb'^āAY^āā žžāb'Yāā [DA { ā ŸāA & žYāā bāYbAbāžAUA' | ž@'ā' b [A { 'āāā^AbA~ \ ā \ žAYāā' ā | žāb'āYb'^āA^AbāžAYŸā'āA^AY^āā žžāb'Yāā'ā^@ & Yb'^āA āāŸZA { 'bāAbāžAUSLNAŸ^@Z'āYb^@A'AbāžAāb \ žžābAZ'žāā^bA { 'āAb^AZ^āāÉAbāžAUSLNA Ÿ^@Z'āYb^@A'āā^bAYāžāŸā [A~@' | āžāžAY^āāZYābDA^āAbāž [AY@žāāb'āā@ž\* \ @žžAb^A@ž~^@bAYŸā'Ÿāā^É 'žžāb'ā' āā'āā^@ & Yb'^āAb^AāY { Ažāa^@Ÿž & žābAYāZA & YāžA~ž@^Z'Yāā^āÉ žžāb'ā' [āāā \ & & Y@žāA^AbāžA Ÿ@ & žāA^ŸŸ' @āā^āAYŸ & ~ \ āAb^AbāžAb' bāžAŌUAY^@Z'āYb^@É

\* I . K K S L G R W 5 P M T G Q G M L

Ōāž' | ž \ YāāA@žŸ' ~žābāA^AbāžAYžāY | ^@AYāžÉ^@Abā^āžAYāā'āb'āāA@žŸ' ~žābāBA { ā^A@ž~^@bA 'āŸžžābA^a'ābž@~žāā^āYāA | ^āžāŸZā'ā ŸāAYŸŸ' @A { ā'āžāžÉāāžA'āžāāYāžZA'ā \ āžž'YāžA ž@'āā'āA^@āāŸ' bAZ@ \ ā \ āžA { 'āāā^bAYžAāžAZā~āā ŸāžAa^@A | ^āYb'^āAbāžA \ ā | ž@'ā' b [AYāŸ'ā^āA ŸāžÉ^@AZ@ \ āA~āŸ'É

**+I 7CR?JG?RCML**

pāŽAUā | Žāb [Aāb@Ybā [A~@^āY' bāA@ŽbYā'Yb'^āY [DAa^@DA^@AYāY'āābAYā [A~Y@b'Y'~YābAĀY^&~āY'āYābDA  
@ŽY'~ŽābA^aAbāŽAYŽāY | ^@DAbāŽA@Žā~^āZŽābDA^@A { 'bāŽāāŽāBāA^@A&Yā'āāAYāā^@ZaY'bāA@Ž~^@bA^aAYā [A  
Y^āZ\YbDAYYbDA^@A~@Yb'Y'ŽAYŽā'Ž | ŽZAb^AYŽā'ābŽ@~Žāā'āYāA | ^āŽāYŽDAa^@A@Žā'āb'āāā\YāAYŽāY | ^@DAa^@A  
~Y@b'Y'~Yb'āāA'āAYāA'ā | Žāb'āYb'^āA^aAbāŽAYāāŽāYb'^āDAYāZĒ^@Aa^@A~Y@b'Y'~Yb'āā'āAbāŽAY^āZ\YbA~@^YŽāāĒA  
S@^ā'Y'bŽZAYŽāY | ^@A'āYā\ZZāAYā [Aa^@&A^aA'āb' &'ZYb'^āDAbā@ŽYbāDA^@AāY@Yāā&ŽābAY [AbāŽA'āZ' | Z\YāA  
^@Aa@'ŽāZāDAaY&'ā [DA^@A^bāŽ@A~Ž@ā^āāYb'āāA'āAā\~~^@bA^aA^@A^āYŽāYāaA^aAbāYbA'āZ' | Z\YāĒA  
ŠŽbYā'Yb'^āAYYāAYŽA | Ž@YāDA { @'bbŽāDAā@Y~ā'YDAŽāŽYb@^ā'YDA^@A~ā [ā'YāĒAĒYbāA^aA@ŽbYā'Yb'^āAYYāAYŽA [A  
bāŽ&āŽā | ŽāDAYY\āŽAa^@AZ'āY'~ā'āY@ [AYYb'^āĒAN^āYŽ@āāA^aA@ŽbYā'Yb'^āAYYāAYŽA@Ž~^@bŽZAb^AbāŽāb' bāŽAŌŪA  
N^^@Z'āYb^@DAŌNUSŇDAbāŽAŪSĽNAN^^@Z'āYb^@DA^@AbāŽAŇŽYāA^aATb\ZZābāĒ

**, I (MLQCOSCLACQ**

Ēā [Aāb\ZZābAa^@āZa@Žā~^āā'YāŽAa^@AYA | ^āYb'^āA^aAbāŽAŌābŽ@~Žāā'āYāAŪ'^āŽāYŽAS^ā'Y [A { 'āāAYŽA  
ā\YāŽYbAb^AZ'āY'~ā'āY@ [AYYb'^āA\~Ab^DAYāZA'āYā\Z'āāDAŽ}~\āā'^āĒAT~ŽY'a'YāY^āZ\YbA~@^YŽZ\@Žā&Y [A  
YŽAa^@āZāZ@ŽA**ābb~ĵĒā' bŽāĒāY\ĒZZ\ĒZZYā'āāb\ZZābāĒ~YāŽāĒY^& \ā b [ĒābYāZY@ZāĒ'ābŽ@~Žāā'āYāĒA**  
**[|'^āŽāYŽĒ~^ā'Y \[ĒAO | ŽāA'aAŌ^āāANy@^@āAŪā | Žāā'b \[A&Ž&YŽ@āAY@Žāā^bAY@' &'āYāā \[A~@^āŽY\ bŽZDAbāŽA](#)**  
Uā | Žāā'b [AYYāA~\@ā\ZāZ'āY'~ā'āY@ [AYYb'^āĒ

.K KCBG?RC &ARGML

YÉA pŽääAYAb@ \ äbžžA~ž@ä^äAYÝ^ \ bAbâžAYÿbA^aA' äbž@~ž@ä^äYäAJ ' ^äžäÿžÉ  
 YÉA S@žžä@ | žAYä [AZ | žžäÿžA^aAbâžAYÿbEÄNž~žäz' äáA^äAbâžAb [ ~žA^aA  
 ' äbž@~ž@ä^äYäA | ^äžäÿžA^aažääžDAž | žžäÿžA & Y [A' äÿä \ žžDAY \ bA' äAä^bAä' & 'bžžA  
 b^DAbž} bA & žääYäžäDA | ^ÿžA & Y äA & žääYäžäDAÿ^Z' ä [Aää \ žäDAžbYÉASä [ ä ÿYäA  
 ž | žžäÿžä \ YäAYäYä^bä' ääDAYžžAääžžbäDAžbYÉää^ \ äZAYžA~äYÝžžA' äAYA  
 äžÿ \ @žAY@žYÉ  
 YÉA N^äbYÿbAbâžAÖ^ääANY@@^ääAS^ä ÿžAñž~Y@b & žäbAYbADÉHEEÄ Î | EÉÐEFAYäZÉ^@A  
 bāžAUä | ž@ä' b [AÖž' ääbäAS^ä ÿžAñž~Y@b & žäbAYbADÉHEE Ä Î EÐEÉ Í EÉAYäZÉ^@AbāžA  
 ÖNUÄFEä^ \ @AN@' ä' äAÖ^bä' äžAYbADÉHEE Ä Î | ENŁ ÖÖÉÄÖNUSNÄÿYäA~@^ | žžA  
 ' & žžYbžA@žž@Yä' äa^@ & Yb' äDAÿÿžžääAb^AbâžA \ ä' | žžä' b [AY^ \ ääžä^@A^äEA  
 YäaDA' ä | žäb' äYb' | žAYää' äbYäÿžDAYäZAYää' äbYäÿžA { 'bäAä^b' a [ ' ääAä^ÿYäAäY { A  
 žäa^@ÿž & žäbAYäžäÿžäÉA bāžAÖNUÄFEä^ \ @Aä^bä' äžAYYäA~@^ | žžA' & žžYbžA  
 ä \ ~^@bAYäZAY@' ä' äA' äbž@ | žäb' äDAžž \ YÿbžA@žž' ~žäbäA^aAbâžAYžäY | ^@A  
 YäZÉ^@Aä \ ~^@b | žA^bāž@äAYÝ^ \ bA@ž~^@b' äáA^~b' ääAYäZA & žžÿYäÿY@žDAYäZA  
 Y^@Z' äYbžAYäA' äE~ž@ä^äAYZ | ^ÿYÿ [A@žä~^ääžA { äžäAY~@^~@ YbžÉ  
 ZÉA TžžäA' & žžYbžA & žžÿYäYbžäb' äAYbAYATŁQOÄTž} \ YäAŁ ääY \ äbAQ \ @äžA

| 'ĤāYŹY [A~@^ | 'Z'āāYA@YāāZĀ@a@Zā~āāZāDA'āYā\Z'āāY@'ā'ā'ābZ@ | Žāb'ĤāDAāYaŽb [A  
~āYāā'āāDA@Yāā~^@bYb'ĤāDAŸYĤ&~Yā'ĤābAbĤāāZāāā~'bYāYāZĒ^@AbĀā~ŽYæA { 'bāāY { A  
Žāā^ŸŽ&ŽābDA@Zā\@YŽāē'āa^@&Yb'ĤāDAŸZā@ZāZ@YāāĒA T b \ ZŽābāYŸāAYŸŽāābāZāZā  
āZ@ | ŸŽāY [AYĤābYŸb'āābāZĀUSĽNAS@'ā@Y&AN^@Z'āYb^@Abā@^ \ āābāZĀONUADFEā^ \ @A  
N@'ā'āĀŌ^bā'āZAYbADĒHEĒĪ I ENĽŌŌĀĀDDGGBĒ

ŸĒA 7C?QQGELKCLRQĪA ŪāZāAbāZā@ŽY~ŽābA^aAbāZāYŹāY | 'Ĥ@AYāZAbāZā@Zā~āZāZābA  
~Y@b'Ÿ~YbZāA'āAbāZāAY&ZāYāYāāZāBAYāZĒ^@A@Zā'Zā'āAbāZāAY&Zā \ ā | Ž@ā'b [A@Zā'ZāYŹā  
^@AY@Zā'āYā^āZā~@^} ' & 'b [Ab^A^āZāYā^bāZ@ĀĀ'ĒZĒāāY@ZābāZāAY&ZāYbāZāb'YāYŸ'ā'b'ZābDAbāZā  
ŸZāYāA^aTb \ ZŽābāA { 'āāYĤāā \ ābA { 'bāAbāZāY~~@^~@'YbZā'āZ' | Z\Yāā'āA & Yæ'āāAYA  
ZŽbZ@ & 'āYb'Ĥā@ZāY@Z'āāYāAYābZ@'āYb' | ŽAYāā'āā & ŽābĀāBĒ

' I 7CNMPRGL E 4NRGLQ

bāZĀ \ ā | Ž@ā'b [AŽāYĤ \ @YāZāAbāāZā { ā^AāY | ŽāZ} ~ Ž@ZāYŹZā'ābZ@ ~ Ž@ā'āYāA | 'ĤāZāYŹAbĤāZ~^@bAbāZāZā  
'āY'ZŽābāAbĤāYĤāĀŌ^āāNY@^āāS^ā'ŸZāNŹ~Y@b & ŽābAYāZāA^YŸYāA { AŽāā^ŸŽ&ŽābĒAŠŸY~ŽābāA^aAbāZā  
ŸZāY | 'Ĥ@āY | ŽAbāZā@'āābDAā^ { Ž | Ž@DAā^AbĤā~@^ | ZŽAYābYbZ & ŽābAbĤāZ'āZ@AŌNUSŸA^@āā^YŸāA { A  
Žāā^ŸŽ&ŽābĒ

Ľā [Aāb \ ZŽābA { ā^A { 'āāZāAbĤāZŸZ' | Žā & ^Zā'āa^@ & Yb'ĤāĤāā@Z~^@b'āāA~@^YŹāāZāDAŸāZĒ^@A^Yb'Yā  
@Zā \ @^ŸZĒ@ZāZ@Yāā'āa^@ & Yb'ĤāAY@ZāZāYĤ \ @YāZŽAbĤā'āZĀUSĽNĒUSĽNAŸYāAYāā^A~@^ | ZŽAbāZā@ŽY~ŽābA^a  
bāZāYŹāY | ^@A { 'bāAYāAYZ | ^YŸYbZābā \ āā \ bAbāZāZāb'@ZāZ~^@b'āāA~@^YŹāāĒA bāZāUSĽNAS@'ā@Y & A  
N^@Z'āYb^@AYŸYāYŸZāZŸYāZŽAYbĀĀĒĒHBAĒĪ I EDĒ I GA^@Abā@^ \ āābāZāŌNUADFEā^ \ @Aā^bā'āZAYbĀĀĒĒHBAĒĪ I EA  
NĽŌŌĀĀDDGGBĒ

Ēē'āāAYāZ~^@bAZāā^aAbāZāYŹāY@'ā [A^Yā'āYbZābāZā@ŽY~ŽābA^aAbāZāYŹāY | 'Ĥ@AbĤā~ \ @ā \ ZAZ'āY'~ā'āY@ [A^@A  
Ÿ@ & 'āYāYāY@āZāĒAĽābā^ \ āābāZāA^YŸYā~^ā'ŸZAYāZā \ ā | Ž@ā'b [A^āā'Y'YāāĀ'āYā \ Z'āāHŌNUSNBAAY | ŽA  
YāāYā'āYb'ĤāAbĤā~^@bZŸYbAbāZāYĤ & & \ ā'b [A@^@ & AbāāZā { ā^AāY | ŽāZāāYāZāZā'āY@' & Žāā^A | 'ĤāZāYŹDA  
'āYā \ Z'āā@ZāYb'Ĥāāā~A | 'ĤāZāYŹDAābYāē'āāDAāZ \ YāāY@Yāā & ŽābDAāZ \ YāAYāY \ ābDAā^āēY'āāZāā \ Yāā  
āZ \ YāYĤābYŸbDAŸZāZāZ \ YāāZ} ~ā^b'Yb'ĤāDAbāZ [AY@ZAYāā^A & 'āZā \ ā^aAbāZā'āZŽZāAYāZAZā'@Zā^aAbāZā  
@ZŸY~ŽābA^aAbāZāYŹāY | ^@A { āZāAYZZ@Zāā'āāYā [AYāāZāZā^āāZāāĒA bāZāZā & Y [AYŹā'āābYāYŹāā'āā  
{ ā'YāAbāZāUā | Ž@ā'b [AYāZĒ^@AāY { AŽāā^ŸŽ&ŽābAYZ'Zā~ \ @ā \ ZāYāYāZāā { 'bā \ bAbāZāYĤ~Z@Yb'Ĥā  
^aAbāZā@ZŸY~ŽābA^aAbāZāYŹāY | ^@Ē

bāZĀ@ŽY~ŽābA^aAbāZāYŹāY | 'Ĥ@'āā { ŽāYĤ & ŽābĤāAY | ŽAYā~Zā^ā^aAbā'āēāZ@AYā^ā'āā'āYā \ Z'āāA  
bāZAS@'ā@Y & AN^@Z'āYb^@Aa@^ & AbāZāU'ĤāZāYŹAS@Z | Žāb'ĤāAYāZĽYb'ĤāANZābZ@A { 'bāAbāZ&A { āZāA  
& ŽZb'āāA { 'bāAYāA^āā'ŸZ@AbĤā'āZāY@Z~^@bĒAĽZ'ā'āYāā [DAbāZANāZ | ŽAYāZASŸ~ZAN@'ā'āANZābZ@AAYā  
YĀDFEā^ \ @AĒYŸZĒb^ĒEĒYŸZĽZ | ^YŸY [A~@^ā@Y & AbĤā~@^ | ZŽā \ ~^@bAYāZā'āa^@ & Yb'ĤāAbĤāZā  
@ZŸY~ŽābA^aAbāZāYŹāY | ^@AYbAbāZā~^ā'ŸZAZZ~Y@b & ŽābAā^āYŸYāA & \ ā'Y~ā'Yā'b [AYāZĒ^@AŌNUSŸNĒEAbāZā  
@ZŸY~ŽābA^aAbāZāYŹāY | ^@AYŸYāAYŸYŹāāYZ | ^YŸY [A~@^ā@Y & ābā@^ \ āāUSĽN'āDFEā^ \ @Aā^bā'āZā  
YbĀĀĒĒHBAĒĪ I ENĽŌŌĀĀDDGGBĒ

ĒĒA+GJGLE ? PCNMPR UGRF /MFL ( ?PPMJJ 5MJGAC ) CNRI 'Ľfi!~!\$~fiĽ!ZŸ%

bāZĀ@ŽY~ŽābA^aAbāZāYŹāY | 'Ĥ@'āāāb@'āāā [AZāYĤ \ @YāZŽAbĤā'āZāYA@Z~^@bA { 'bāAŌNUSŸNDA  
{ ā^A { 'āāYĤāZ \ YbAYā'ā | Žāb'āYb'ĤāĒAŌbā'ābāZāāZāZ@YāA~@YŸYb'ŸZā^aŌNUSNAbĤā@Z~^@bA  
YāāZāYb'Ĥāā^a'ābZ@~Zā^āYāA | 'ĤāZāYŹAbĤāZāUā | Ž@ā'b [AŌZ'āābAS^ā'ŸZā  
NŹ~Y@b & ŽābĒAŠŸY~^@bāAY@ZAYāā^A^@ { Y@ZŽAbĤāZāNŸYāA^aTb \ ZŽābāRāā'ŸZAYāZāZā  
b'āZāŌŪAN^@Z'āYb^@A \ ~^āA@ZŸZ'~bĒ

ĽI +GJGLE ? PCNMPR UGRF RFC : LGTCPQGRW - CGEFRQ 5MJGAC ) CN?PRKCLR 'Ľfi!~!\$~fiĽ!#fifi%

N@ & 'āYāYāY@āZāH&Y [AYŹA~ \ @ā \ ZŽAYābZ@Aa'ā'āāYāā'ā'b'Yā@Z~^@bA { 'bāUŌSŸNĒAŌ^āāA  
NY@^āāS^ā'ŸZANŹ~Y@b & ŽābAYāZĒ^@AYāAYZ | ^YŸYbZā & Y [AYŸYĤ & ~Yā [AbāZā@ZŸY~ŽābA^a  
bāZāYŹāY | ^@A'āAa'ā'āāYAY@Z~^@bAYbAUŌSŸNĒAAbāZā@ZŸY~ŽābA^aAbāZāYŹāY | ^@A'āā  
'ābZbZābZā'āYĤ \ āāZā'āāāZ@ | ŸZāDAēāZā { 'āāYŹAbZāZ@ZŽAbĤāZāŌ^āāNY@^āāA  
Uā | Ž@ā'b [AN^ \ āāZā'āāANZābZ@ĀĀĒĒHBAĒĪ I EFDĪ €BDANāZ | ŽAYāZASŸ~ZAN@'ā'āANZābZ@A  
ĀĒĒHBAĒĪ EĒĒĪ ĒBDAYāZĒ^@AN^ & Žāb'YāU'ĤāZāYŹAYāZANā'āZĽZ | ^YŸY [ANZābZ@ĀĀĒĒHBAĒĪ EĒA  
ŌŌŌSBĒ

fi +GJGLE ? PCNMPR UGRF RFC 9GRJC . = (MMPBGL?RMP °Łfi!~†\$"~fižž\$"%

pāžA@žŸ'~žābA^aAbāžAŸžāY|'^@AYŸāA&žžbA{ 'bāAbāžA b' bāžAÜAN^^Z'āYb^@Ab^AZ'āŸ\āāA  
~^āā'ŸāžA|'^iYb'^āāA^aAbāžA0ābž@~ž@ā^āYāAÜ'^āžāŸžAS^iŸ[DA { ā Ÿā'āŸā \žžāA@žāYb'^āāā'~A  
|^āžāŸžDAābYāæ'āāDAāž}\YāāY@Yāā&žābDAāž}\YāAYāāY\ābDAā^āEŸ^āāžāā \Yāāž}\YāA  
Ÿ^ābYŸbDAYāZAāž}\YāAZ}~ā^bYb'^āÉ

(i 8RSBCLR (MLBSAR 5PMACBSPCQ

pāžATb\žžābAN^žžA^aAN^āZ\ŸbAYāZAN^āZ\ŸbAS@^Ÿžž\@žāAY@žāŸ^ābY'āžžA'āAbāžAN^&& \ā'b[ATbYāZY@ZāA  
PYā\YāA { ā ŸāAYŸāAYžAa^\āZA^āā'āžAYbA**ābb-ĭĕĕā bžāĕāŸ\ĕžž\ĕžžYā^aāb\žžābāĕ-ŸāžāĕŸ^A&& \ā'b[ĕA**  
**ābYāZY@ZāĕŸ^āZ\Ÿbĕā[ābž&Ā** ^|^'āæ@^ā'āāā' āžA^Ÿ\&'bžA bž@ĕPāb~ŸžAEŸb'b~Ÿb'b~žŸ'~āā'

8RSBCLR 7GEFRQ% 9FC 7CQNMLBCLR

ŌāAbāŽāžY@'ááAā^b'a'ŸYb'^āAbžbž@AYāZAYáY'āAYbAbāŽāY'žá'āā'áA^aAbāŽāžY@'ááDAbāŽāŽā~^āZžābāāb\ZžābA { 'āāA  
YžAYZ|'āžžAbāYbAāāāŽāāYāAbāŽā@'áābāāā'ābžžYžā^ { ÉA T b \ ZžābāA { 'bāAYā [A\* \ žāb'^āāAYŸ^ \ bAbāž'@A@'áābāAY@ŽA  
žāY^ \ @YāžžAb^AY^ābYŸbAbāžAŁāā^Y'YbžANžYāA^aTb \ ZžābāÉ

ÉÉA PāŽāāb \ ZžābA'āAžāb'bažžAb^AYžāA' | ŽāAYāAž } ~āYāYb'^āA^aAbāŽāY^āZ \ Ÿbāā [ ābž & AYāZAbāŽāYāY@āžāāBÉ

ĐÉA PāŽāāb \ ZžābA'āAžāb'bažžAb^Aa@žžž^ & Aa^& AāY@Yāā & ŽābA^@A@žYā'Yb'^āAY [A^bāž@āA'ā | ŽžA'āAbāžA  
ā'b \ Yb'^āÉ

€ÉA PāŽāāb \ ZžābA'āAžāb'bažžAb^AbāžA \ āžA^aAYāāAY | Y'āYŸāžA'ābž@āYāYāZAZž } bžāYāā \ ~-^@bAāž@ | ŸžāA'āA  
ZžYā'āāA { 'bāAbāžAYābž@ & YbA^aAbāžA'āY'ZžābÉ

FÉA PāŽāāb \ ZžābA'āAžāb'bažžAb^A^YāžžYbAb^AYa & ž & žYž@A^aAYATb \ ZžābAN^āZ \ ŸbAM^Y@ZaA^@A@žYā'āāA^a  
^aā'ŸYāA^@A~ž@āYāYāā'YbA^a'ābž@žābÉ

GÉA PāŽāāb \ ZžābA'āAžāb'bažžAb^AAY | ŽAYāAYZ | ā^@A^aAā'āāžž@AYā^ā'āāAYŸY^ & ~Yā [Aāž@Éā' & A  
bā^ \ āā^ \ bAbāžāY^āZ \ ŸbA~@^Yžāā'āYā \ Z'āāAYā [A'ā'YāA & žžb'āāDāY^āāž@žāYžDAbāžA  
āžY@'āāDāYāZ~^āābÉāžY@'āāA & žžb'āāÉ

HÉA PāŽāāb \ ZžābA'āAžāb'bažžAb^AYžA~@žāžābAbā^ \ āā^ \ bAbāžāžāY@'āāDāY \ bAā^bAZ \ @'āāAbāžAZžā'Yž@Yb'^āā  
^aAbāžATb \ ZžābAN^āZ \ ŸbAŁZ & 'ā'āb@Yb^@ÉM^Y@ZÉ

IÉA PāŽāāb \ ZžābA'āAžāb'bažžAb^Aāā^ { AYāā'āa^@ & Yb'^āA~@žāžābžžAYāY'āābāā' & āāž@AYāZAb^A | ž { A~ž@b'āžāb  
& Ybž@YāāA \ ~-^@b'āāAbāžāYŸYāžAYāY'āābāā' & āāž@É

ÍÉA PāŽāāb \ ZžābA'āAžāb'bažžAb^A~@žāžāb~ž@b'āžāb'āa^@ & Yb'^āAYāZAbāžA'āa^@ & Yb'^āA^aA { 'bāžāāžāD  
ž } Ÿā \ Z'āāAYāY@YŸbž@A { 'bāžāāžāDAb^Aā \ ŸābYāb'Ybžāā'āāžž@AYāžAYāZAb^A@žā~^āZAb^AbāžāYāY@āžāA  
YāY'āābāā' & āāž@ÉA Pā'āA'āYā \ ZžāA~@^~^ā'āāA\* \ žāb'^āāAb^AYžAYāāžžA^aAbāžA@žY'~žābA^aAbāžA  
YžāY | ^@AYāžÉ^@A { 'bāžāāžāÉ

ĪÉA PāŽāāb \ ZžābA'āAžāb'bažžAb^Aa@žžž^ & Aa^& AāY | āāA'@žžž | YābA~ž@āYāA'āb^@ [AZ'āY \ āāžžA^@  
Ÿ^āāžž@žžZ \ @'āāAbāžāY^āZ \ ŸbA~@^YžāāāPāžATb \ ZžābAN^āZ \ ŸbAŁZ & 'ā'āb@Yb^@A { 'āāZžž@ & āžA  
@žāž | YāYžÉB

ÈÉÉPāŽāāb \ ZžābA'āAžāb'bažžAb^A@ž & Y'āAā'āžābāā'ÉžÉDAā^bAb^Aā' | Žā'āa^@ & Yb'^āAYāY'āābāā' & āāž@āžābB' \ b  
& \ ābāYžā'āa^@ & žžAbāYbAbāžāYŸYāžA { 'āāAYžāžžY'žžžA^āAbāžA'āa^@ & Yb'^āA~@žāžābžžÉ

ÈÈÉPāŽāāb \ ZžābA'āAžāb'bažžAb^A { 'bbžāAZ^Y \ & žābYb'^āA^aAbāžA'ābY^ & žA^aAbāžāY^āZ \ ŸbāžY@'āāÉ

ÈĐÉPāŽāāb \ ZžābA'āAžāb'bažžAb^A & YāžAYA { @'bbžāAY~žYāA^aAbāžA Z'āY'~ā'āY@ [AZžY'ā'āA { 'bā'āA' | ŽAĀGB  
Y \ ā'āžāāZAY [ āA^aAbāžAZYbžA^aAā^b'a'ŸYb'^āA^aAbāYbAZžY'ā'āāÉUā' | ž@ā'b [AZ'āY'~ā'āY@ [AYŸb'^āāAY@žA  
Y~žYāžžAb^AbāžANžYāA^aTb \ ZžābāÉ

PāŽā@žY'~žābA^aAbāžāYžāY | ^@AYāZAbāžA@žā~^āžžābāāb \ ZžābāāAYāāYžA'āa^@ & žžDA'āA { @'b'āāDA^aAbāžA  
a^āā^ { 'āāĪ

- M bāžA^ \ bY^ & žA^aAbāžāY^āZ \ ŸbāžY@'āāĪ
- M bāžA~@^Yžž \ @žāAa^@AbāžAY~žYāāA~@^YžžāĪ
- M Yā [AYāYāāžA'āAbāžA@žā \ ābābāYbA^YŸ \ @āA~@'^@Ab^AbāžAb' & žAbāžA@žā \ ābāAYžY^ & žA'āYāĪ
- M { āžāAbāžA@žā \ ābāAYžY^ & žA'āYāÉ

)I &BBGRGML?J 7CQMSPAC .LDMPK?RGML

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4FGM : GARG KQ MD (PGKC (MKNCLQ?RGML%

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( MKNJWGLE UGRF RP?DDGA QGELQ% ÚŽá ĽžáY@ŽAb^ÁÝŽA^~Ž@YbŽŽÉ~Y@æŽZA^áAÝY&~\áA'áAÝ^&~á'YáÝŽA  
{ 'báAYáAb@Yaa'ÝÁY^á@^áAZŽ|'ÝŽáÉá'áááÉAÑ'á^ÝŽ|'ááAbáŽA'ááb@ \Yb^áA^áAYAb@Yaa'ÝÁY^á@^áAZŽ|'ÝŽá'áAYA  
|'áYb^áA^áAbáŽA \á |Žá'b[A~^á'Ý[AÝáZAá \YáŽYbAb^AYAa'áŽA^aAÁ€GÉÉÉÉ

7CQRPGRCB PM?BU?WQ% Š^YZ { Y|áA^áAÝY&~\áA&Y[AÝŽAZŽá'ááYbŽŽAY[AbáŽA^áAb'ááA^aAY~@^~@YbŽŽA  
á'áááA^@A^áŽÉ { Y[Ab@Yaa'ÝÉAR~Ž@Yb'ááAYA|Žá'ÝáŽA'áAbáŽA^~^á'bŽAZ@ŽYb^áAbáYáAŽŽá'ááYbŽŽA'áAYA  
|'áYb^áA^aA \á |Žá'b[A~^á'Ý[AÝáZAá \YáŽYbAb^AYAa'áŽA^aAÁ€GÉÉÉÉ

&@?LBMLCB TCFGAJQC% Áá^áE@Žá ŽŽáYáAb \ZZá@bDAaYŸ \áb[DAáYaaBAÓaA[ ^ \A & \áAbáŽY|ŽA[ ^ \@AÝY@A  
^|Žá'ááAbDA~áŽYáŽA^á'á[AÓNUSŇAYbADÉHE€I IÉ€€FÉASY@æ'ááA'áAZ}ÝŽááA^aA IĐAá^ \á'áA'áAYA|'áYb^áA^aA  
\á'|Žá'b[A~^á'Ý[ÉAáŽAZ@'|Ž@A^aYA[A'á^~Ž@YÝáŽA|Žá'ÝáŽA& \áAbá^b'a[AÓNUSŇA^aAbáŽA^áYb^áA^aAbáŽA  
|Žá'ÝáŽA^aYb \ŽA^aAbáŽA~@^á'Ž&AYáZAá^ { Aá^ááAbáŽA|Žá'ÝáŽA'áAZ}~ŽYbŽŽAb^AYŽA'á^~Ž@YÝáŽÉ

### 5&70.3 ,

Tb \ZZáAbáY@ŽAŽ}~ŽYbŽŽAb^AYŽAY { Y@ŽA^aAYáZAa^á@ { A~Y@æ'ááA@ \áŽáÉ@Žá \áYb^ááÉá'ááYáŽAYáZA  
á~ŽY'YáAYáá^ \áŽŽ&Žá@bDAY|Y'áYÝáŽA^áAbáŽAÓNUSŇA^SY@æ'ááA { ŽYá'bZA  
[ább~iféa'bžáéá'ýéžžé~Y@æ'ááéA'ýáZA~\Yá'Ý|ŽŽAbá^ \ááAZÉ&Y'áYáZAáá'ZZAÓNUAÝ^&& \á'ÝYb^ááÉ](#)

## : LGTCPQGRW - CGEFRQ 5MJGAC ) CN?PRKCLR

Uá'|Žá'b[AÓŽ'áAbáAS^á'ÝŽANŽ~Y@b&ŽáAbÁUÓSNBAáŽ@|ŽáAbáŽAUá'|Žá'b[AÓŽ'áAbáAÝ^&& \á'b[DA^aA  
{ á'YáAÓ^ááANY@^ááA'áAYA~Y@bÉAUÓSNÁŽáA^@ÝŽáAYáAbYbŽáY { áAYáZAY'b[A^@Z'áYáÝŽáAa^@AbáŽáYáŽb[A^aA  
Ž|Ž@|Ý^Z[A'áAbáŽAÝ^&& \á'b[ÉAUÓSNÁ&^á'b^@áAYáZA@Žá~^áZáAb^AÍÉÉAYÝááÉAUAÓSNÁ'áA^áYbŽŽAYbA  
Đ€ÉFAÚY@Žáá|'ááŽANŽá@Š^YZDAYáZAá^áÉŽ&Ž@áŽáY[AÝÝááA^@AYÝááA^@A'áa^@&Yb^áA&Y[AÝŽA  
Z@ŽYbŽŽAb^AbáŽAZŽ~Y@b&ŽáAbAYbADÉHEIÉ€€IÉÉÉ

UÓSNÁ@Ž\* \ŽáAbAbáYbAá@ \ZZáAbáYŽY'áá'|YáAb^aAbáŽAaYbAbáYbAbY&~Ž@'ááA { 'báA^@A@Ž&^|'ááAN'b[A  
áb@ŽŽbAáY&ŽA'áááAYáŽÉ^@Ab@Yaa'ÝÁY^á@^áAá'áááAÁTb^~DAÚ'ŽáZDAŽbYÉBA'áAYAY@' &'áYáA^aaŽááŽÉAU'áYb^@áA  
{ 'ááAYŽA~@^áŽY \bŽŽÉ

CE \@báŽ@DAbáŽA^áá^ { 'ááA^@Z'áYáÝŽáAY@Žá'ábŽZAa^@A[ ^ \@A'áa^@ & Yb^áÉAáPáŽáŽA^@Z'áYáÝŽáDAŽáA^@ÝŽŽAY[A  
UÓSNDAY@ŽAbáŽA^áAbA@Ž\* \ŽáAb[A|'áYbŽŽÉ

: LGTCPQGRW - CGEFRQ 4PBGL?LAC Ž†Ł" S^á'ýbáA \áŽA^aAZáŽYb@^á'YA { 'ŽáŽááAZŽ|'ÝŽáA { á'áAZ@'|'ááDA  
{ 'báAYAAÉÉÉÉÉÉAa'áŽA^@A^@ŽAa^@AYZZ'b^áYáA^aaŽááŽáÉAT' &'áY@A^@Z'áYáÝŽáAY@ŽA'áAZaaŽYbA'áATáYæŽA  
ÓŽ'ááAbADAMŽYá { ^ZDAT^ \báA@ \YáZAYáZA & Yá[A^báŽ@Aá \@@^ \áZ'ááAY^& \á'b'ŽáÉ

ŁZZ'b^áYáá[DAZ@'|Žá'áAáá^ \áZAYŽAY { Y@ŽA^aAbáŽA~@^á'Yb^áA^@A|Žá'ÝáŽáAb^Ab \áA@'ááAbÁ|ŽáAbA^áAb^A  
NY@^ááAM^ \áŽ|Y@ŽAa^&AT^ \báY^ \áZAMŽá|^@AM^ \áŽ|Y@ZAYŽb { ŽŽáA IÍÉÉAYÉ&ÉAYáZAHÍÉÉA~É&ÉA  
{ ŽŽæZY[áÉAá'áá'áAb@'Ybá[AŽáa^@ÝŽZA { 'báA'áŽáA^aAÁÉÉÉÉÉÉ

&JJ LGEFR N?PIGLE NPMFG@GRCBi Q^A~Y@æ'ááA^áAÝ'b[Aáb@ŽŽbáAYŽb { ŽŽáAĐIÉÉAYÉ&ÉAYáZAGIÉÉAYÉ&É

\* KCPECLAW 8LMU ' ?Li Q^A~Y@æ'ááA^áAÝ'b[Aáb@ŽŽbáA { áŽááá^ { AŽ}ÝŽŽáAb { ^AÁĐBA'áYáŽáÉANÝááA

+0PC 1?LCQI SY@æ'áá'āā~@^ā'ý'bžžá'āA] ^āžāA { āž@žAYāa'@žāYāžā'āā~^ābžžÉ

## 4DD (?KNSQ 'CF?TGMP 5MJGAW

pāžAUá' | žžā'b [A@žāž@ | žžābāžā@' áābā^A@ž | ž { Aāb \ žžābA & 'āý^āž \ ýbābāYbA^ýý \ @āā^āāýý & ~ \ āā { āžāā  
ā \ ýāāýžāý | ^@A@žāžāýbāā \ ~^āābāžā' ābžā' b [A^āābāžāUá' | žžā'b [ÉA T b \ žžābāY@žāž & 'āžžābāYbābāž [A  
āž@ | žAYāA@ž~@žāžābYb' | žāā^āA^āāNY@^āāUá' | žžā'b [AYāZAY^bā~^ā'b' | žAYāZā' āý~@^~@Ybžā  
ýžāý | ^@AYāāžýbābāžāUá' | žžā'b [āā' & YāžAYāZā@ž~ \ bYb' ^āÉA T b \ žžābāY@žāžāý^ \ @Yāžžāb^āýžā' ā | ^ā | žžā  
'āābāž' @AY^ & & \ ā'b [A^ā~^ā'b' | žā { Y [ āDAā \ ýāYāY^ & & \ ā'b [Aāž@ | ýžāYāZā^āýYāā^ | žžā & žābEāpāžā  
Uá' | žžā'b [AZžā' @žāb^āāY | žāāb \ žžābāYýbYāY^bāA@žā~^āā' ýāžāYāZā & Yb \ @žāž~@žāžābYb' | žāÉ

ŌāAbāžāYāZā^āā' āý~@^~@Ybžāýžāý | ^@A^āāýý~ \ ādābāžāNžYā^āA T b \ žžābāA^@AZžā' āāžžā  
'ā | žāb' āýbžābāžāžāýāý@āžāYāZā & Y [A & Yāžāžāžāž@Yāāb^ābāžā T b \ žžābāN^āž \ ýbA T [ ābž & É  
Ā T b \ žžābāA^@^āYā' ] Yb' ^āāāā \ āžāžā~^āā' ýāžāā^@A | ^āYb' āābāžāžā@žā \ āYb' ^āāā { āāýžāā \ ýāžýbābA  
bāžāāY & žāāYāýb' ^āā' & ~^āžžāā^@A | ^āYb' ^āābāYbA^ýý \ @A^āýý & ~ \ āBÉ

Łāāā^āYāāāb \ žžābāA & ^ | žā' āb^ābāž' @Aāž { A@žā' žžāýžāDābāž [AY@žāžāý^ \ @Yāžžāb^āžž | žā^~āYā@Y~^~@bā  
{ 'bābāž' @Aāž { Aāž' āāý^ ^āEāU~^āāY@' | YāDAāb \ žžābāāā^ \ āZā' āb^āZ \ ýžābāž & āžā | žāDāž } ýāYāāžā  
bžāž~^āāžÉýžāā~^āāžāā \ & ýž@āDAYāZā & žžā { 'bābāž' @AY^ & & \ ā'b [A~žž@āā^āYāý^@Z' YāýYā' āā^ābāYbA  
bāž [AYýā' žžāb' a [A { 'bābāž' @Aāž { Aāž' āāý^ ^āYāāYýžāYāZā~žžā^āYā' b' žāA@Ybāž@ābāYā & žžā [AYāYā  
YZZ@žāÉ

## 8RSBCLR (MLBSAR \*VNCAR?RGMLQ

ŁāābYbžžAYý^ | žžāāb \ žžābāY@žāž' ~žýbžžāb^āžž & ^āāb@Ybžā@žā~žýbāā^@AYāā & ž & ýž@āā^ābāžā  
ā^ýýāāý^ & & \ ā'b [A@žāY@žāžāā^ābāž' @A~āYýžā^āA@žā' žžāýžÉāCEY'ā \ @žāb^āYžāž@žāb^ābāžāā^ { 'āā  
ā \ žžā' āžāYýā@žā \ ābā' āAZ' āý'~ā'āY@ [AYýb' ^āÉ  
ÉĀTā^ { A@žā~žýbāā^@AbāžAY@žYā { āž@žā [ ^ \ āā' | žÉA T' āāā^āZ' āžā~žýbā' āýā \ žžDāý \ bAY@žāā^bāā' & 'bžž  
b^āā' bbž@' āāīāā' bž@' āāīāžžāb@ \ ýb' ^āā^āā~@^~ž@b [īAb@žā~Yāā' āāīā~ \ ýā' ýā \ @' āYb' ^āīāā \ ž' b [īā  
'āā \ āb' āāYāā \ YāžīAYāZā' āāžāYā~Y@æ' āāÉ  
ĐĒAR~ž@Ybžāžāžýb^ā' ýāžž' ýžāāābž@žāāDāb | āāžbýÉBAYbA@žYā^āYýāžāž | žāāžā~žý' Yāā [ āYbžāYb  
ā' āābAYāžžY@ā [A' ābāžā & ^@' āāÉ  
€ĒA P Y' ābY' āYāA^@žž@ [A@žā' žžāýžÉāO | žžāýžā^āAYAZ' ā^@žž@ā [A@žā' žžāýžāýYā' āýā \ žžābāž  
ā^āā { 'āāīāā^ \ āžā~Y@b' žāīā | ^āYb' ^āā^āāYāý^ā^āYāZāZ@ \ āāY { āīā~ \ ýā' ýā' āb^ } ýýb' ^āīā  
ž' ýžāā | žāā' āžīāāY@Yāā & žāīā^@A^bāž@AZ' āžāY@Zāā^@Abāžā' 'āābāā^ābāž@āÉ  
FĒARā' ^āY { A~@^ā' ý' bāā~žāAYāý^ā^āý^āb' āž@ā' āā~ \ ýā' ýā~āYýžāÉAS \ ýā' ýā~āYýžāāY@žābāāž  
{ ā' ýāYā [ ^āžāýYāžābž@ā@žžā [AYāZā' āýā \ žžāā' žž { YāāDāāb@žžbāDāb@žžāY { āāDāā^ & žā  
^ \ bž^@AY@žYā^āY~Y@b & žābAY^ & ~āž } žāDāYāZā' āā' žžā~Y@æžžā^@A & ^ | 'āāýý@āÉ

## 4TCP?JJ , SGBGLE 5PGLAGNJCQ

ÉÉAQŽ'ááY^@āAāY|ŽAY@'áābAb^AbāŽA~ŽYŸŽa\āŽāā^[] & ŽābA^aAbāŽ'@A~@^~Ž@b [É  
ĐÉA T b \ ZŽābāAā' | 'áá'āAbāŽāŽāāŽ'ááY^@ā^ZāAāY|ŽAYāA^Yá'áYb^āAb^A@Žā~ŽYbAbāŽāŽA@'áābā  
YāZAb^AŽāā^ [AbāŽAYŽāŽa'bāA^aAā' | 'áá'āAbāŽA { 'ZŽ@AY^& & \ā'b [É  
€ÉA0^āāNY@@^āāUAá | Ž@ā'b [AāYāAYAZ \ b [Ab^A { ^@āA~@^YŸb' | Žā [A { 'bāAbāŽAY^& & \ā'b'Žāā \ @@^ \ āZ'áā  
bāŽAUá' | Ž@ā'b [Ab^AYāā'ābAb \ ZŽābā'āAbāŽ'@Ab@Yāā'b^āAb^AY^& & \ā'b [Aā' | 'ááÉ  
FÉA Ū āŽāY~@^~@^YbŽAYāZ~^āā'YāŽDAbāŽAUá' | Ž@ā'b [Aāā^ \ āZa'ābŽ@ | ŽāŽāā { 'abā [Ab^A@Žā^ā | ŽA'āā \ Žā  
YāZA~@^YāŽ&āAY \ āŽZAY [Aāb \ ZŽābāÉ  
GÉAŁ āāŽ'ááY^@āDA'āYā \ Z'āāY \ ā'āŽāāŽāDAYā \ @YāŽāDAYāZāYāZā^@ZāDAYāA^YāāY^@YāY^@YbŽAb^AY^@ŽYbŽ  
YāZAā \ ābY'āāŽ'ááY^@ā^ZāŽā | 'ā'ā & ŽābābāYbAY@ŽAāYāŽAYāZāŽāā^ [YŸāZā^@AYāāÉ

## 4DDGAG?J (MKKSLGA?RGML

p { ^A^aa'ŸYā&ŽYāāA^aY^& & \ā'ŸYb'^āAŽ } 'ābAa@^&AbāŽAUá' | Ž@ā'b [Ab^Aa \ āāEb' & ŽA \ āZŽ@ā@YZ \ YbŽDA  
ā@YZ \ YbŽDAYāZA~Y@Eb' & ŽAāb \ ZŽābāĪ

CE^@AYāāAb \ ZŽābāDAŽYŸāAāb \ ZŽāb'āAUá' | Ž@ā'b [A'āā \ ŽZAZÉ & YāAYŸY^ \ ābÉ

CE^@A@Žā'ZŽābAāb \ ZŽābāDAŽYŸāAāb \ ZŽābāAYāā'āāŽZ^āAYŸY & ~ \ āA & Y'āY^ } a'āAbāŽANĒAÓÉA  
Ō^ & ŸY@Z^ATb \ ZŽābANŽābŽ@ÉACE^@AYāāA^bāŽ@Aāb \ ZŽābāDAŽYŸāAāb \ ZŽābāAY \ @@ŽābA & Y'ā'āā  
YZZ@ŽāāÉ

8RSBCLRQ ?PC CVNCARCB RM AFCAI RFCGP QR?LB?PB K?GJ ?LB / ( : C~K?GJ ?AAMSLRQ ML ? B?GJWA  
@?QGQi < FGJC QRSBCLRQ K?W K?GLR?GL ?LW LSK@CP MD C~K?GJ ?AAMSLRQ UGRF MRFCP QCPTGACQ\_A  
CTCPW QRSBCLR GQ PCOSGPCB RM K?GLR?GL ?L ?ARGTC / ( : C~K?GJ ?AAMSLR ?LB SQC GR DMPA  
CJCARPMLGA AMK KSLGA?RGML PCJ?RCB RM : LGTCPQGRW @SQGLCQQi 9FGQ PCOSGPCKCLR NPMTGBCQA  
PC?QML?@JC ?QSP?LAC RF?R RFC QCLBCP MP PCAGNGCLR MD CJCARPMLGA KCQQ?ECQ K?RAFCQ FGQ MP FCPA  
RPSC GBCLRGRWI

## 5MQRGLE 5MJGAW ?LB 5PMACBSPCQ



ÓŽáŽŸYá~^á'Ÿ[A\* \ Žáb^ááAŸYáAYŽAZ' @ŽŸbŽZAb^AbáŽáŸN' @ŽŸb^@A^aAS \ @ŸáYá'ááAÁk \ } 'á'Y@ [ATŽ@ | ŸŽáAYbA  
ĐÉHÉÉÍ | É€ÉĐGÉAN^ábŽábAYáZA \* \ Žáb^ááAŽáY@Z'ááA~^áb'ááAŸ [Aáb \ ŽŽábáAYáZAá^áEUá' | Ž@áb' [Aá@^ \ ~á  
áá^ \ áZAYŽAZ' @ŽŸbŽZAb^AbáŽARaa' ŸŽA^aATb \ ŽŽábAŁ Ÿb' | b' ŽáAYbAĐÉHÉÉÍ | ÉĐÍ | A^@A  
[áb \ ŽŽábYŸb' | b' Žá L áŸ \ ÉŽZ \](#)

, :.) \* 1.3 \* 8 + 47 85 \* (.+. ( 9 > 5 \* 8 4 + 5 : ' 1. (.9 >

897. : 2 < .3 ) 4 < 5 & .39.3 ,

ÉÉA Łb@ \ & A { 'áz^ { A~Y'áb'ááA'áAbáŽáŸNÉAÓÉAÓ^ & ŸY@Z^ATb \ ŽŽábANžábŽ@A'áA@ŽáŽ@ | ŽZAa^@A & Yá^@DA  
ŸY&~ \ áE { 'ŽŽáŽ | ŽábAa^@A@ONUŽáb' b' ŽáA^áá [ÉARáá [A^áŽáŽ | ŽábA & Y [AYŽA~ \ Yá'Ÿ'] ŽZAYbA^áŽA  
b' & ŽÉ  
ĐÉA PáŽAá@^ \ ~A & \ ába~@^ | 'ŽŽAbáŽ' @A^ { áA~Y'ábAÁ \ áŽA { YbŽ@AYáŽZA~^ábŽ@A~Y'ábA^áá [A~áŽYáŽÉĐÉA  
SY'ábA & \ ábAYŽ@Ž & ^ | ŽZA { 'bá'áADFáá^ \ @áA^AbáŽáŽ | ŽábÉ  
ÉÉA ÓAbáŽAYáŽYá'ááAY^ & ~Yá [AYáŽYááAbáŽA { 'áz^ { DA [ ^ \ @A^ @áYá' ] Yb' ^ áA^ @AZŽ~Y@b & ŽábA { 'ááAYŽA  
YáY@áŽZAYaAZŽAbáYbA@YááŽáAa@^ & ÁÉÉÉÉAÉAÁFÉÉÉ  
FÉA P^AáŽba~Ž@ & 'áá' ^ áAa^@Abá' áAa^@ & A^aA~ \ Yá'Ÿ'b [DA~áŽYáŽáŸ^ & ~áŽbŽAbáŽARaa' ŸŽA^aATb \ ŽŽábA  
Ł Ÿb' | b' ŽáAS \ Yá'Ÿ'b [AŠŽ\* \ ŽábACE^@ & DA { 'báAbáŽáŽá' bAYáZAZŽá' ááAYbbYŸáŽZDAYáZAá \ Y & 'bAb^AbáŽA  
Raa' ŸŽA^aATb \ ŽŽábAŁ Ÿb' | b' ŽáAARTŁBAa^@AY~@^ | YáÉ  
GÉA ŁábŽ@A [ ^ \ @A@Ž\* \ ŽábA'áAY~@^ | ŽZDA [ ^ \ A & Y [Aá'ááAbáŽAYb@ \ & A { 'áz^ { AYŸáŽáZY@Aá^ŸYbŽZá' áAbáŽA  
RTŁÉ

' & 33 \* 78

ÉÉA MYááŽ@áA & Y [A^áá [AYŽAá \ ááA^áAbáŽA { YááA^aAbáŽAŁb@ \ & AYŸ@^ááAa@^ & AbáŽA { 'áz^ { áA^aAbáŽ  
ŸÉAÓÉAÓ^ & ŸY@Z^ATb \ ŽŽábANžábŽ@AYáZAa^@A^ & AbáŽAá^@' ] ^ábYá@Y'áAYbAbáŽAb~^A^aAbáŽáAbž~áÉAT' áááA  
& Y [Aá^bAYŽAá \ ááA^áAYá [A^báŽ@A { YááA^@AábY'@ { Y [AáYáZ@Y'áÉ  
ĐÉA MYááŽ@áA & Y [AYŽAá \ ááAa^@AYA~Ž@ ^AZA^a^áŽA { ŽŽéÉAbáŽ [A { 'ááAYŽA@Ž & ^ | ŽZAYabž@AáŽ | ŽáAZY [ áA  
^@Aa^áá^ { 'ááAbáŽAZY [A^aAYáAYZ | Ž@b' áŽZáŽ | ŽábÉ  
ÉÉA MYááŽ@áA & Y [Aá^bAŽ' ] ŽŽZAbá@ŽZÁAÉBAbáŽŽbA { 'ŽZÁY [Aá' ] ÁÁHBaáŽŽbAá^ááA' áAá' ] ŽAYáZAáá^ \ áZAYŽA  
á \ ááAYbAYááŽ' ááAbA^aAYbAáŽYábáŽ' ááAbAáŽŽbAa@^ & AbáŽAáá^@É  
FÉA O'ŸŽ~b' ^ááA & Y [AYŽA & YŽZá' áAbáŽAá' ] ŽDá^AYŸb' ^áAYáZáYáá' ááAZ \ @Yb' ^áA^aAá' ááAa^@Aá~ŽŸYáA  
ŸY&~ \ ááŽ | ŽábAÁŽÉáÉAÓ^ & ŽŸ^ & 'ááÉACEY & á [A ŸŽŽéŽáZDAÓ@ŽŽéA ŸŽŽéDAŽbŸÉBA { 'bAbáŽA  
Y~@^ | YáA^aAbáŽARTŁÉ  
GÉA Tb \ ŽŽábA^@áYá' ] Yb' ^ááA { 'ááAb^A~^ábAYŽ [ ^áZAbáŽAá \ 'ŽŽá' áŽáA { @'bbŽáA' áAbá' áA~^á'Ÿ [DA & \ ába  
á \ Y & 'bAYa { @'bbŽáA@Ž\* \ ŽábAb^AbáŽARTŁAa^@AY~@^ | YáÉ  
HÉA Uá' | Ž@áb' [AZŽ~Y@b & ŽábáA { á^A { 'ááAb^A~^ábAYŽ [ ^áZAbáŽAá \ 'ŽŽá' áŽáA { @'bbŽáA' áAbá' áA~^á'Ÿ [A & \ ába  
áŽbAbáŽAY~@^ | YáA^aAbáŽARaa' ŸŽA^aATb \ } 'á'Y@ [ATŽ@ | ŸŽáÉ  
IÉA ŁááAYááŽ@áAY@ŽAY~@^ | ŽZAYáZAábY & ~ŽŽAa^@AY~@^ | YáDA' áŸ' \ Z' ááAYa@Ž & ^ | YáZAYbŽDÁY [AbáŽA  
RTŁAÁá^ŸYbŽZá' áAT \ b' ŽAĐÉÉA^aAbáŽáŸNÉAÓÉAÓ^ & ŸY@Z^ATb \ ŽŽábANžábŽ@DAYŸ' | ŽAbáŽAY^ááAb^@ŽBÉ

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ÉÉA Pá'áAa^@ & A^aA~ \ Yá'Ÿ'b [A'áAY | Y'áYáŽAa^@A@Žá' ábž@ŽZAáb \ ŽŽábAa@^ \ ~áA^@AZŽ~Y@b & ŽábAb^A~@^ & ^bŽA  
YáA^@áYá' ] Yb' ^áYáŽ | ŽábA^@A & ŽŽb' ááÉ  
ĐÉA NáYáé' ááAÁáá^ \ áZAYŽA^áAbáŽAá' ŽZ { YáéA^áá [AYáZAá^bA^áAYá [AY' \ 'áZ' áááA^@Ab@YááAYŸYááÉ  
ÉÉA Ó@^ \ ~áA & \ ába~@^ | 'ŽŽAbáŽ' @A^ { áAYáYáéÉ  
FÉA P^AáŽba~Ž@ & 'áá' ^ áAa^@Abá' áAa^@ & A^aA~ \ Yá'Ÿ'b [DA~áŽYáŽáŸ^ & ~áŽbŽAbáŽARaa' ŸŽA^aATb \ ŽŽábA  
Ł Ÿb' | b' ŽáAS \ Yá'Ÿ'b [AŠŽ\* \ ŽábACE^@ & DA { 'báAbáŽáŽá' @ŽZAbž' } bDAYáZáA^ŸYb' ^áAYbbYŸáŽZDA



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ÉÉA S \ Y á Y b [ A a b Y æ ' á á Y á Z É ^ @ A á ' á á á Y Y á A Y Z A \ á Z Z A ^ Y Y á ^ á Y á á [ A b ^ A ~ @ ^ & ^ b Z A Z | Z á b á A ^ @ A Y Y b | ' b Z á É

ĐÉA P ^ A á Z b A ~ Z @ & ' á á ' ^ á A a ^ @ A b á ' á A a ^ @ & A ^ a A ~ \ Y á Y ' b [ D A ~ á Z Y á Z A Y ^ & ~ á Z b Z A b á Z A R a a Y Z A ^ a A T b \ Z Z á b A  
Ł Y b ' | ' b Z á A S \ Y á Y b [ A Š Z \* \ Z á b A C E ^ @ & D A { ' b á A b á Z A b Z } b D A Z Z á ' á á A Y á Z A á ^ Y Y b ^ á A Y b b Y Y á Z Z D A Y á Z A á \ Y & ' b A  
b ^ A b á Z A R a a Y Z A ^ a A T b \ Z Z á b A Ł Y b ' | ' b Z á A A R T Ł B A a ^ @ A Y ~ ~ @ ^ | Y á É

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ÉÉA Ł á [ A á ~ Z Y Y á A ~ \ Y á Y ' b [ A ~ @ Z á Z á b Y b ^ á A á b A b A ^ \ b á ' á Z Z A ' á A b á ' á A ~ á Y [ A & \ á b A Y Z A Y ~ ~ @ ^ | Z Z á b á @ ^ \ á á A b á Z A  
R T Ł É

ĐÉA P á Z A ^ @ á Y á ' Y b ^ á D A Z Z ~ Y @ b & Z á b A ^ @ A á ^ \ ~ A & \ á b A Y ^ & ~ á Z b Z A b á Z A R a a Y Z A ^ a A T b \ Z Z á b A Ł Y b ' | ' b Z á A  
S \ Y á Y b [ A Š Z \* \ Z á b A C E ^ @ & D A { ' b á A b á Z A b Z } b D A Z Z á ' á á D A ^ @ A ^ b á Z @ A Z Z á Y @ ~ b ^ á A Y á Z A á ^ Y Y b ^ á A Y b b Y Y á Z Z D A  
Y á Z A á \ Y & ' b A b ^ A b á Z A R a a Y Z A ^ a A T b \ Z Z á b A Ł Y b ' | ' b Z á A A R T Ł B A a ^ @ A Y ~ ~ @ ^ | Y á É

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ÉÉA C E á [ Z @ á A Y Y a A Y Z A ~ á Y Y Z Z A ' á á Z Z A ' á Z ' | Z \ Y á A á b \ Z Z á b A & Y á Y ^ } Z á A { ' b á A b á Z A Y ~ ~ @ ^ | Y á A ^ A b á Z A R a a Y Z A ^ a A  
T b \ Z Z á b A Ł Y b ' | ' b Z á A A R T Ł B É A P a Z @ Z A Y @ Z A Y A b b Y á A ^ a É Ě Ě A á b \ Z Z á b A & Y á Y ^ } Z á É

ĐÉA P ^ A á Z b A ~ Z @ & ' á á ' ^ á A a ^ @ A b á ' á A a ^ @ & A ^ a A ~ \ Y á Y ' b [ D A ~ á Z Y á Z A Y ^ & ~ á Z b Z A b á Z A R a a Y Z A ^ a A T b \ Z Z á b A  
Ł Y b ' | ' b Z á A S \ Y á Y b [ A Š Z \* \ Z á b A C E ^ @ & D A Y b b Y Y á A b á Z á á [ Z @ A b ^ A b á Z A @ Z \* \ Z á b D A Y á Z A á \ Y & ' b A b ^ A b á Z A R T Ł A  
a ^ @ A Y ~ ~ @ ^ | Y á É

€ÉA Š Z \* \ Z á b á A & \ á b A Y Z á A \ Y & ' b b Z Z A Y b A á Z Y a b Z á A Z Y [ á A ' á A Y Z | Y á Y Z É A Ł a b Z @ A [ ^ \ @ A @ Z \* \ Z á b A ' á A  
Y ~ ~ @ ^ | Z Z D A [ ^ \ A & \ á b A Y ^ á b Y Y b A b á Z A á \ ~ Z @ | ' á ^ @ A ' á A b á Z A P Y á A N Z á b Z @ A b ^ A á Y á Z Z \ á Z A Y A b ' & Z A b ^ A á b \ a a  
b á Z A & Y á Y ^ } Z á É

3 & 5 0 . 3 - 4 1 ) \* 7 8

ÉÉA Q Y ~ æ ' á A á ^ á Z Z @ á A Y Y á A Y Z A ~ á Y Y Z Z A ' á A b á Z A T Y á ^ b b A Ě ' á ' á á A Ó Y á á A Y á Z É ^ @ A O ' á á b Z ' á A M Y á Z á É A P a Z @ Z A Y @ Z A  
Đ Ě Ě A á Y ~ æ ' á A á ^ á Z Z @ á A ' á A b á Z A Ě ' á ' á á A Ó Y á á A Y á Z A Y Z á Y Y Z á b A Y @ Z Y á É

ĐÉA P á Z A ^ @ & Y b A a ^ @ A b á Z A á Y ~ æ ' á A á ^ á Z Z @ A ~ \ Y á Y ' b [ A ' á A Y A @ Z Y b Y á á Z á b a Y b A ' á A H A ' á Y á Z á A Ü A F A ' á Y á Z á É A  
Ó @ ^ \ ~ á A { ' á á A ^ á á [ A Y Z A Y Y á Z A b ^ A ~ @ ' á b A ^ á A á Z á á Z Z É

€ÉA Q Y ~ æ ' á A Ó ^ á Z Z @ á A { ' á á Y Z A @ Z á Z @ | Z Z A ^ á A Y A a ' @ á b E Y ^ & Z D A a ' @ á b E á Z @ | Z Z A Y Y á ' á A Y á Z A ^ á á [ A b { ^ A b Y Y á Z á b Z á b A  
~ @ ^ & ^ b ^ á á A { ' á á Y Z A Y á á ^ { Z Z A ^ á A b Y Y á Z á A Y b A ^ á Z á b ' & Z É

FÉA P ^ A á Z b A ~ Z @ & ' á á ' ^ á A a ^ @ A b á ' á A a ^ @ & A ^ a A ~ \ Y á Y ' b [ D A ~ á Z Y á Z A Y ^ & ~ á Z b Z A b á Z A R a a Y Z A ^ a A T b \ Z Z á b A  
Ł Y b ' | ' b Z á A S \ Y á Y b [ A Š Z \* \ Z á b A C E ^ @ & D A { ' b á A b á Z A b Z } b D A Z Z á ' á á A Y á Z A á ^ Y Y b ^ á A Y b b Y Y á Z Z D A Y á Z A á \ Y & ' b A  
b ^ A b á Z A R a a Y Z A ^ a A T b \ Z Z á b A Ł Y b ' | ' b Z á A A R T Ł B A a ^ @ A Y ~ ~ @ ^ | Y á É A P a Z @ Z A b Z } b A Z A Y \ & Z á b A & \ á b A Y Z A  
Y b b Y Y á Z Z É

GÉA Ł a b Z @ A [ ^ \ @ A @ Z \* \ Z á b A ' á A Y ~ ~ @ ^ | Z Z D A [ ^ \ A & Y [ A á ' á á A b á Z á b Y Y á Z á b Z á b A Y Y á Z á Z Y @ A á ^ Y Y b Z Z A ' á A b á Z A R T Ł É

5 4 8 9 . 3 , & 5 5 7 4 ; & 1 5 7 4 ( \* ) : 7 \* 8

ÉÉA Ł á á A a á [ Z @ á A Y á Z A Y á á Z @ á A Y @ Z A Y ~ ~ @ ^ | Z Z A Y á Z A á b Y & ~ Z Z A a ^ @ A Y ~ ~ @ ^ | Y á D A ' á Y á \ Z ' á á A Y A @ Z & ^ | Y á A Z Y b Z D A  
Y [ A b á Z A R T Ł A A á ^ á Y Y b Z Z A ' á A T \ ' b Z A Đ Ě Ě A ^ a A b á Z A Ě A É A Ó ^ & Y Y @ Z A T b \ Z Z á b A N Z á b Z @ D A Y Y ^ | Z á b á Z A  
Y ^ á á b b ^ @ Z B É

ĐÉA R b á Z @ A á ~ Z Y Y á A ~ \ Y á Y ' b [ A Z Z á Y @ Y Z Z A Y Y ^ | Z A & \ á b A Y Z á A \ Y & ' b b Z Z A b ^ A b á Z A R T Ł A { ' b á A b á Z A S \ Y á Y ' b [ A  
Š Z \* \ Z á b A C E ^ @ & A Y á Z A { ' b á A b á Z A b Z } b D A Z Z á ' á á A Y á Z A ^ b á Z A ~ Z @ b ' á Z á b A ' á a ^ @ & Y b ^ á A Y b b Y Y á Z Z É

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ÉÁ pāŽARTŁAābYaaA { 'āāA & ^ā'b^@AYāZA & Y'ābY'āAbāŽAY \ āāŽb'āAY^Y@ZāDAZ^@āDAYāZA { 'āZ^ { āā'āAbāŽA  
 Tb \ ŽŽābNŽābŽ@AYāZAYāA^aaAZybŽZA^@A \ āY~@^ | ŽZAAā Ž@āA^@AYYāāŽ@āH^āYA { ŽŽāā [AYYā'āÉ  
 ĐÁ pāŽARTŁAābYaaA { 'āāA & ^ā'b^@AYāZA & Y'ābY'āAbāŽAY \ āāŽb'āAY^Y@ZāDAZ^@āDAYāZA { 'āZ^ { āA^aAbāŽA  
 ŃÉÁŌÉÁŌ^ & Y@Z^ATb \ ŽŽābNŽābŽ@A^āAY'É { ŽŽāā [AYYā'āÉ  
 €Á pāŽAŁ \ } 'āY@ [ATŽ@ | YžāAYāZĀŌ^ \ āžæŽž~'āāZž~Y@b & ŽābāA { 'āāA & ^ā'b^@A \ āY \ bā^@ ' ]žZA  
 ~āb'āāāA'āAYZ & 'ā'āb@Yb' | ŽY^ & & ^āAY \ 'āZ'āāāZ } Yž~bA { āž@žAā^bžZAY' | ŽÉ  
 FÁ CÉY' \ ab [DAābYaaDAYāZAāb \ ŽŽābāY@ŽāŽāY' \ @YāžZAb^AbYæžAZ^ { āZybžZAAā Ž@āAYāZAY' @āā  
 \ āY~@^ | ŽZA^@A \* \ Žāb'āāY'āZAAā Ž@āAb^AbāŽAYbbŽāb'āā^AbāŽARTŁAābYaaAYāāžžžžžÉAbāŽA^aa'YžZA  
 ābYaaA { 'āāA^āā^ { A \ ~A { 'bāAYā [AāYāYb'āāābāYbAY@ŽāāžžžžžAa^@A~ā'Y [A | 'ā'Yb'āāāÉ

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Ō'j'āāA^āAYY & ~\āā'āAY@Žā'ZžāYžāYāāA'āHAY \ ā \* \ ŽAYāZA { ^āžž@a \ āāž } ~ž@'žāYžDAYAY'YbYā [ābAa^@A  
 ~ž@ā^āYāA^@^ { bāYāZā'āžž~žāžžāYžÉŌbA~@^ | ŽžāA'āā \ & Ž@Y'āZā^~@b \ ā'b'žāAb^Aā | ŽA { 'bāA^bāž@āA { ā^A  
 Y@žAZ'aaž@žābAa^ & A [ ^ \ @āžāDAb^AYžY^ & ŽAYāžžžžž@DAb^AY^ & & \ ā'Y'YbžA { ŽāDAb^A & YāYāžāY'āāā'YbāA  
 ā \ Yžžāā \ āā [DAb^A & YæžāA^ \ āZAZžY'ā'āāDAYāZAb^AY@^YžžāA [ ^ \ @A~ž@ā~žYb' | ŽA^āAbāŽA { ^@āžÉ

ŪžA'ā | 'bžA [ ^ \ Ab^Až & Y'YžžAbāžā~'@'bA^aY^ & & \ ā'b [DAbYæžāA^ & žA@'āæāA { 'āā'āāā [DA & žžbA [ ^ \ @AYāYāāžāāžāA  
 YāZA@žā~^āā'Y'ā'b'žāAā^āžābā [DAžžY@āAa^ & A [ ^ \ @A & 'ābYæžāAā \ & Yā [DAYāZ@žā~žYbA [ ^ \ @āžāaDA [ ^ \ @A  
 āž'āāY^@āDA [ ^ \ @AY^ & & \ ā'b [DAYāZA [ ^ \ @Ažā | 'āā & žābAžāž@āžb'Y'Yā [É

Łābā^ \ āāAbāžAŪā' | Ž@ā'b [AāYāāžžbāābYāZY@ZāA^aAYžāY | ^@Aa^@AYāāAāb \ ŽžābāDAā^ & žAYZZ'b'āYāAá \ Žžā'āžāA  
 Y@žAāžYžāāY@ [Aa^@Abā^āZA { ā^Aā' | ŽAb^āžbāž@A'āAbāžA@žā'žžāYžāYāāāÉAN \ @'āāAY^ & & \ ā'b [A & žžb'āāāA [ ^ \ A  
 { 'āāAbYāæAY' \ bāā^ { Až | ž@ [ ^ \ āžAY'āāā^ { AžY'āA^bāž@A@žā~žYbÉACE^@A \* \ žāb'āāā^@AY^ & & žābāDA~āžYāžA  
 Y^ābY'YbAbāžARaa'YžA^aSžā'žžāYžāŌ'āZAYbAāĐÉHBAÉ I ÉFFÉ Í DA@žā'āž L āY \ Éžž \ DAYāžÉ^@A | 'ā'bA^ \ @A { žYā'bžA  
 YbIAābb~IÉā'bžāÉāY \ Éžž \ É@žā'āžÉ



&RFJCRGA COSGNKCLR &Y[A^a^bAYZ\ aZZA' aAbZ@Z'a'Zz'Z'aYzAaYaaA^A' & &ZZ'YbZa[AYZaYyZ'aAb^A@Z'a'Zz'aYzA  
aYaaAZ^^@aAYaZA { 'aZ^ { aEAb'a'a'ay\ Zz'aY\ bA' aA^bAa' & 'bZZAb^IAaYbZAY^Y@ZaiA@^aaZ@AYaYZZaiAYY@^aaZa  
YaZAa^YzZ[AZ\* \~&ZabIAa^aaAYaZAYaZYYaaZ\* \~&ZabIAYYaZbYaaDAy^ { a'aaAYYaaDAa^bYyaaDA@ \aY[A  
YyaaDAa^YyZ@AYYaaDA | ^aaZ[AyYaaDAbZaa'a'ayYaaAyaZA@Yy\* \ZbAYYaaDAa@ 'aYZZaDAyAZaA^bZ@aEakbaZb'YA  
Z\* \~&ZabA&Y[A^aa[AyZAb^@ZZA'aA@Z'a'Zz'aYzAaYaaA^A^&aDAYaZA'aA^bA~Z@&'bbZZA'aAaYaa { Y[ aDAy^& &^aA  
Y@ZyAdaZab@^^&aDAZbYE

'GICQ Y@ZaA^bA~Z@&'bbZZA'aAa^ \aaZaA^AAbY@ { ZaaEAbaz@ZAY@ZaA^AAb^AYaZaYy'a'b'ZaAY|Y'aYyZaA^AY'aeZaA

Ú a ž a Y ž Y á ' á á A ā b Y a a A ^ @ A b ā ž A & Y ' ā b ž a Y ā Y ž A ā b Y a a B A Y @ ž A ' ā A Y A @ ž ā b @ ^ ^ & A b ^ A Y ž Y ā A ^ @ A & Y æ ž A @ ž ~ Y ' @ ā D A b ā ž A  
ž ā b @ Y ā Y ž A { ' ā ā Y ž A Y ž ā ^ ā ž ž A Y ā ž A Y ā ^ Y æ ž ž A ^ @ @ ^ ~ ž ž A ^ a a E A O b A ' ā A & Y ā ž Y b ^ @ [ A b ā Y b A ā b \ ž ž ā b ā \ ā ž A Y ā ^ b ā ž @ A  
@ ž ā b @ ^ ^ & A ž \ @ ' ā ā A b ā Y b ā b ' & ž É A b ā ž A \ ā ' | ž @ ā ' b [ A @ ž ā ž @ | ž ā b ā ž A @ ' ā ā b A b ^ A b Y æ ž ž A ž ' ā Y ~ ā ' ā Y @ [ A Y Y b ^ ā ā Y á Y ' ā ā b A Y ā [ A  
ā b \ ž ž ā b A { ā ^ A | ^ ā Y b ž ā A b ā ' ā A ~ ^ ā Y [ É

(MK KML ?PC? QN?AC

\*JCARP6A?J ?NNJG?LACQ & \ābāYŹA'āYŹ^&~ā'YāYŹA { 'bāAbāŽAā^\ā'āáYāZaA@ŽAY^ZŽāA^AbāŽAN'b[A^aA  
Uā|Ž@ā'b[AŌŽ'áābāÉAOYŹāY~ā'YāYŹA & \ābāYŹAUŌAY~@^|ŽŽÉAŁ~@^|ŽŽAY~ā'YāYŹāA'āYā\ZŽābŽ@Ž^āDA  
Y^&~\bŽ@āDAbŽāŽ|'ā'^āāDAŇÚŇA~āY[Ž@āDA@Ža@'āŽ@Yb^@āĀFĒHĀY\Y'YāŽŽbA^@Aā&YāāŽ@BDA&'Y@^ { Y|ŽāĀĒĀY\Y'Yā  
a^bāYāZa\āŽŽ@A ÍĒĒ { YbbāBDAŹāYāāŽbāDAaYāāDAŹāāŽŽA&YāāŽ@āDAZŽāāā'āābāDAāY'@AZ@|Ž@āDAāY'@A  
āb@Y'āābŽāŽ@āAYāZāY\@ā'āāA'^āāĒĒRāŽA@Ža@'āŽ@Yb^@A'āAYāā^ { ŽŽA~Ž@AābYāZY@ZAZ^YāZā@^&AYāZa\~Ab^A  
b { ^Aa^@Abā'āŽA'āZŹ}~YāZŽZa^YŹ\~YāY[A@^&āĀb@~āŽāYāZa\* \YZāBÉAS@^ā'Y'bŽZa'bŽ&ā'āYā\ZŽA  
b^YābŽ@āDAb^YābŽ@A^|ŽāāDAā^ba~^bāDAā \āāAY&~āDAŽāŽYb@'YāāāāāŽbāAYāZa { ^āāDAā'āāāĀ'āYā\Z'āāAbāŽA  
ÓŽ^@āŽĀCE^Ž&Yāāā'āāBDA^'ā~^~Y^@āA~^~Ž@āDAā~YŹAāŽYbŽ@āDA~Ž@Y^āYb^@āDAY'@AY^āZ'b^āŽ@āĀ\āāŽāā  
&ŽŽ'Yāā[AY~@^|ŽŽBDAāYā'āāŽāAY\āYāY&~āDAYāZa~^b~^@\@@'AY\@āŽ@āĒĒRāā[AUŌAY~@^|ŽŽDAŹ@Y\ba  
Y@ŽYāŽ@Ab [~ŽāŽ}bŽāā'āāY^@ZāAYāZa~^ { Ž@Eāb@~āA&Y[AYŹA\āŽŽÉAŁā[AŽ]bŽāā'āāY^@Za { 'bā^\bAYāā\@āŽA

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9 - \* +4114 <.3 , 89\* 58%

ÉÉÁ SàYŸŽAYAb^ { ŽāYbAbāŽāYāŽā^AbāŽāZ^Ab^~@Ž | ŽābAā & ^æŽAa^ & AY^ & 'áá' āb^AbāŽA@^ & É  
ĐÉÁ ÓYááAYāāŽŽbA^ \ bA^AbāŽA@^ & A { 'āZ^ { Ab^A' āZ'YbŽAbāYbA [ ^ \ AY@ŽAbāŽŽÉ  
ĚÉÁ NYāāĐÉHE€Ī | EÉĐ€FAb^A' | ŽAÓNUSŇA [ ^ \ @A^AYb' ^āÉ

Ě'ŽAZ@'āāAY@ŽAY^āZ\ YbŽZA' āHŽYŸāA@Žā'ZŽāYŽAāYāāŽYŸāAāŽ & ŽābŽ@ÉACEY'ā' āāb^AŽ | YŸ \ YbŽAbāŽAY' 'āZ'āáA  
Z\@' āāAYāAYāY@ & A { 'āā@Žā \ ābA' āAZ'āY'~ā'āY@ [ AYŸb' ^āÉ

pāŽAUA' | Žā'b [ AŌŽ'āābāACE'ŽA PY@āāYāā' āā~ŽŸbāŽYŸāUA' | Žā'b [ AY' \ āZ'āáA^āAYā@Žā' \ āY@AāYāŽZ \ āŽÉpāŽA  
Ě'ŽA PY@āāYāā & Y [ AŽābŽ@AYā [ A@^ & A { 'bā' \ bā^b' a' YŸb' ^āAb^AZŽbŽ@ & 'āŽA' a' bā' āā' āā' | ^āYb' ^āA^Aa' @ŽA'YāŽb [ A  
~^ā'Y'ŽāÉ

NY \ ā'āáAYāYāāŽAYāY@ & A Y [ A' āZ \ YŽA~Yā' YAYāZAYŸ@ [ AāŽ | Ž@ŽAY^āāŽ\* \ ŽāYŽāÉACEYāāŽAYāY@ & āAY@ŽYbŽAYāA  
Žā' | ^ā & ŽābA { āŽ@ŽAāb \ ZŽābāA^AbŽāA' āā^@ŽAbāŽAYāY@ & AYāā \ & 'āāAbāŽ@ŽA' āā^āZYāāŽ@ÉAŌáā^' āāAYāA  
YāY@ & A Y [ AYŸ \ āŽāb \ ZŽābāAb^AYŽŸ^ & ŽA' āā \ @ŽZDA^ | Ž@Y^ & ŽAY [ Aā & ^æŽDA^Ab^Aā^āŽAbāŽ' @A' | ŽāÉ  
pāŽ@Žā^@ŽDAbāŽAUA' | Žā'b [ AbYæŽāAbāŽAYŸb' ^āāA^AbY & ~Ž@' āáA { 'bāA@ŽAYāY@ & āDAā & ^æŽAZŽbŽŸb^@āDA  
ā~@' āāāŽ@āDAYāZA@' ŽAŽ' } b' āá \ āāŽ@āA { ā' YāAb@' āāŽ@AYāAY@ & A | Ž@ [ AāŽ@' ^ \ āā [ É

pāŽAa^āā { 'āáA { 'āāYŽAY^āā'ZŽ@ŽZAYāAā \ aa'Y'ŽābAYŸ \ āŽA^@A' & ŽZ'YbŽA'ābŽ@' & Aā \ ā~Žāā' ^āAa@^ & AbāŽA  
Uā' | Žā'b [ A~ŽāZ'āāAYAY^āZ \ YbAāŽY@' āāĪ

ÉÉÁ ŌābŽāb' ^āYāā [ AāŽbb' āāAYAa' ŽA^aAYā [ AāYb \ @ŽÉ  
ĐÉÁ S \ āā' āāAYAa' @ŽAYāY@ & A { āžāA^āZYāāŽ@A' āā~@ŽāŽābÉ

pāŽAa^āā { 'āáA { 'āāYŽAY^āā'ZŽ@ŽZAā \ aa'Y'ŽābAYŸ \ āžA^@A' & ŽZ'YbŽA@Ž & ^ | YāAa@^ & AbāŽA@Žā'ZŽāYŽāYāāA  
~ŽāZ'āāAYāāŽY@' āāĪ

ÉÉÁ P'ā \ āžA^aAa' @ŽAŽ' } b' āá \ 'āāŽ@āÉ  
ĐÉÁ pY & ~Ž@' āáA { 'bāAbāŽA~@^bŽŸb' | Žā^AZA^āAa' @ŽAYāY@ & A~ \ āāAbYb' ^āāÉ  
ĚÉÁ ŠŽ & ^ | 'āāAYŸbbŽ@' ŽāAa@^ & AYA@^ & Aā & ^æŽAZŽbŽŸb^@É

, ?K@JGLE 'āA~@^ā'Y'bŽZĪ

, SCQRQĪ OāY^@b' āáA [ ^ \ @A \ ŽābāA' āAbāŽAāYāā { Y [ āDAYŸbā@^ & āDAYāZā^ \ 'āāŽāA' āA [ ^ \ @A@Žā~^āā'Y'ā' b [ ÉA  
pā'āā'āYā \ ZŽāA@Žā'ZŽābāA^AbāŽ@AY' \ 'Z'āāāA { ā^AY@ŽA | 'ā' b' āáA [ ^ \ ÉAŌ \ ŽābāA^aA@Žā'ZŽābāAŽZā'āŽZAYāA  
bā^āŽA { ā^AY@ŽA^AbAYā^YŸ \ ~YābA^AbāŽA@^ & BAY@ŽA~Ž@ & 'bbŽZAb^AbY [ A^ | Ž@ā' āābAY \ bAY@ŽA^Abā~Ž@ & 'bbŽZ  
b^AbY [ A & ^@ŽAbāYāAb { ^AY^āāŽŸ \ b' | ŽAā' āābāBā' āAbāŽA@Žā'ZŽāYŽāYāāA~@^ | 'ZZZAbāŽA \ ŽābA' āA^AbāŽAāY & ŽA  
āŽ' AYāAbāŽAā' āb' āāA@Žā'ZŽābÉA.R GQ GKNMPR?LR RF?R RFC PGEFR MD ? PMMK K?RC RM NPQT?AWA  
QSNCPQCBCQ RFC PGEFR MD RFC PMMK K?RC RM F?TC ESCQRQ GL RFC PMMKĪ Ù^ \ AY@ŽA@Ž & āŽZAbāYbA  
[ ^ \ AY@ŽA@Žā~^āā'YāŽA^@AbāŽAYŸb' ^āāA^Aa [ ^ \ @A \ ŽābāAYāZA { 'āāYŽAāŽāZAYŸŸ^ \ ābYŸāŽA^AYā [ AZY & YāŽāDA  
ā^āāA^aA~@^~Ž@b [ DA^AYŽāY | ^AbāYbA' āā' ā' b' YbŽZAY [ A [ ^ \ @A \ ŽābāÉAŪ^ \ Aāā^ \ āZAYŸŸ^ & ~Yā [ A [ ^ \ @A \ ŽābāA  
YbAYāāb' & ŽāA { ā' āŽA^āAYŸ & ~ \ āÉ



Ň\ \ 'ááAa'áYáāA { ŽŽæDA \* \ 'Žbāā\ \ āAY@Ž'āAŽaaŽYbADFāā\ \ āAYAZY [ÉAŁA | 'āYb'āA^āAbāžāŽA \* \ 'Žbāā\ \ āA { 'āā  
@Žā \ ābā'āAYā~ŁŽ DGLCDAYāZAYā [Aā \ Yāž\* \ 'Žābā | 'āYb'āāā & Y [A@Žā \ ābā'āAbāžāG K KCB?RC PCKMT?J DPM K A  
RFC PCQGBCLAC F?JJQ DMP RFC PCK?GLBCP MD DGL?JQ UCCL

7CN?GPQ b^Aāb \ ŽŽābA^A^ & āYŸYāYŽA@Ž\* \ ŽābZZAYbĪA  
[ābb~āīĒ { { {É& \[āYā^āY\ 'āZ'āāÉY^&Ē& \[āYā^āY\ 'āZ'āāÉ&āYŽZāY\ ābÉYā~KYŸYbā \ &JGFDHĒĒĪ ÍĪĀTŽ@J A](#)  
YŽŌ^ā āJÉAŁāāAŽ\* \ ŽābāAā^Ab^āāZACEYŸ'ā' b' ŽāANŽ~Y@b & ŽābAYāZA { 'āāYŽAYZZ@ŽāāZZA { 'bā'āFĪAā^ \ @āÉAŌā' bA  
'āAYāAŽ&Ž'āžāY [DA~āZŸYāŽāŽbA [^ \ @A ŠŁDATŠŁDALNDAYāZÉ^@AŌNUSŌAēā^ { ÉA T b \ ŽŽābāY@ŽĪā^bAYŸāŽAb^A  
āYāžZ \ āZAY~^ āb & ŽābāA^@A & Y'ābžāYāYŽAb^Ažābž@Abāž@A@^A & Aa^@AbāžA@Ž~Y'@ÉA PY ābžāYāYŽābYāā'āA  
ā^bA~Ž@ & 'bbZZAb^Ažābž@Aāb \ ŽŽābA^A^ & ābA^~Ž@A^@ & A@ž~Y'@āA \ āb'āÉĒÉAYÉ & ÉDA \ āžāā' bA' āYāAž&Ž'āžāY [ÉA  
Pāž [AY@ŽA~Ž@ & 'bbZZAb^A { ^@āA' āAYāāY^A^ & ^āAY@ŽYā^āAbāžA@Žā' ZŽāYžāYāāAYāZAYŸYbā^A^ & āYŽā'āā'āā  
YbA IAYÉ & ÉA Ū āžāYŸYbā^A^ & āAY@ŽA^N^āžZcA^@A & Y'ābžāYāYŽA^A^YāžYā'āāDAZ^A^b^ābž@AbāžA@Žāb^A^ & ÉA  
ŌāābžYZDA \ āžAYāAYābž@āYbžāYŸYbā^A^ & A' āAbāžāY \ 'āZ'āāÉAbāžAŪā' | Ž'ā' b [A@žāž@ | ŽāAbāžA@'āābAb^AbYæŽA  
Z'āY'~ā'āY@ [AYŸb'āāYāY'āābAYā [Aāb \ ŽŽābA { ā^A | 'āYbžābā'āA~^ā'Y [É

7CQGBCLAW 7COS@PCKCLRĪ ŁāāŽābž@'āāAāb \ ŽŽābDA^AAbAYZ'b'āYāYāžDAžZZAb^AZŽYāY@Žābāž@'AābYb \ āAYāA  
YA@Žā'ŽābA^@AY^A^ & \ bž@Abā@^ \ āāAbāžAŌā@āā & ŽābAŠžāž@ | Yb'ā^ACE^@ & AāžābAY [AbāžARāā'YŽA^A  
ŁZ & 'āā'āÉAb^āāžāA^bAY^A^ & \ b'āāAa^A^ & Aā^ & ŽAY@ŽA@Ž\* \ 'ŽZAb^Aā' | ŽA^āAYY & ~ \ āAž \ 'āābāž@'Aa'@āb { ^A  
[ŽY@āÉPā'āA~^ā'Y [AYāā^AY~~ā' ŽāAb^Abā^āžA { ā^Ab^YāāāžA'āb^AbāžAŪā' | Ž'ā' b [AYāAb^YZ'b'ā^YāA'@ābE [ŽY@A  
āb \ ŽŽābāÉAN^A^ & \ b'āā'āAZŽā'āžZAYāA' | 'āāž'Yā \ ā' | Žā [A'āAbāžA~Ž@ & YāžābAYāZA~@' & Y@ [A@Žā'ZZāYžA^AAYA  
~Y@žābA^AāžāYāā \ Y@Z'YāÉARāYžAYāāb \ ŽŽābžābYŸY'āāžāā'āāž@AābYb \ āAYāAYA@Žā'ZZābDAžÉāāžA & \ ābA  
āžZæAY~@^ | YāAa^@AYāYāYāāžA^āAbYb \ āAb^AY^A^ & \ bž@ÉACE^@ & YāA@Ž\* \ 'ŽābāYŸYāYŽA & YZZAbā@^ \ āābāžA  
Rāā'YŽA^AŠžā'ZZāYžAŌ'āžAa^@AY^āā'ZZ@Yb'āāAY [AbāžAŌ^ \ ā'āāAN^āb^YŸYbAŠž' | Ž { AM^AY@žÉ

7MMDQ JCBECQ ?LB @?JAMLGQ Y@ŽA^āāA' & 'bāAa^@AbāžāYāžb [A^aAYāāÉAŪ^ \ AY@žā^bA~Ž@ & 'bbZZAb^A~ \ bA  
āā^āžāDA^A^ZDA~āYābāDAžYÉA^āāžāžāA^@AYŸY^ā'žāÉ

7MMK (MLBGRGMLĪ Øžž~A'āA & 'āZāYāžb [AYāZAbāžAYŸ'ā'b [Ab^Až] } bAa^A^ & A [^ \ @A@^A^ & A { āžāAYZZ'āāA  
a \ ā'b \ @žÉAŁā [Ab [~ŽA^aA~Y@b' b'ā^A^@AAYāā'āāA & Ybž@'YāAbāYbA@ž~@žāžābāYā~^bžāb'YāAa'@žāY]Y@ZA { 'āāA^bA  
YŽA~Ž@ & 'bbZZA'ÉžÉAYŸYāāž@ÉbY~žāb@žāAāYāā'āāA^ | Ž@ā & ^æZAZžbžYb^āA^@AZžY^@Yb' | Žāā'āābāAYāā'āāA  
a^A^ & AbāžAYž'ā'āāBÉAŪ^ \ & Y [AāYāāA [^ \ @A^ { āAY \ @bY'āāDAŸ \ bAŪā' | Ž'ā' b [E'āā \ ŽZAZ@Y~žāA & \ ābAYžA@žÉā \ āāA  
YžA^@žāYāžYæ'āāA^ \ bA^AbāžA@^A^ & ÉA Ū Ybž@YžZāAY@žā^bAYāā^ { ŽZā'āAbāžA@žā'ZZāYžAāYāāā&J DSPLGRSPCA  
NPCQCLR GL RFC PMMK BSPGLE AFCAI'GL KSQR @C NPCQCLR GL RFC PMMK ?R AFCAI'MSRĪ Ū^ \ AY@žā^bA  
~ž@ & 'bbZZAb^A~Y'ābA [^ \ @A@^A^ & ÉANžY^@Yb'āāA \ āžZāA^@A~žY'YāA^YŸYā'āāA & \ ābAYžA^aAa'@žāžbY@ZYābA  
& Ybž@'YāÉAŁāāZžY^@Yb' | Žāā'āābāA & \ ābAYžA^@A'āž^@ā \ āžAYāZAUŌAY~@^ | ŽžÉAŌ' | ŽANā'āb & YāAb@žžāY@žā  
ā^bA~ž@ & 'bbZZA'āA@žā'ZZāYžAāYāāÉAQž'āAā'āāAY@žā~@^ā'Y' bžZā'āA@žā'ZZāYžAāYāāA { 'āžA { āÉA T b@žžbAYāZA  
b@Yāā'Yāā'āāāA^AYā [Aā^@bAY@žā~@^ā'Y' bžZā'āAāb \ Žžāb'āA^A^ & āÉ

QY'āāDAb \ & YbYŸæāDAbY~žA^aAYā [Aē'āZDAYāZ^Abāž@AZž | 'YžāāžžYŸYāāA^A & '@@^@āAYāZAZ^@āBAbāYbA { 'āāA  
ZY & YāžAYā [A~Y'ābžZā^@A { ^žžāAā \ @aYŸžAY@žā^bA~ž@ & 'bbžžÉbY & ~ž@'āāA { 'bāA^@A@ž { 'āāA^aAžāžYb@'YŸYā  
a' } b \ @žā'āA~@^ā'Y' bžžÉAbāžAŪā' | Ž'ā' b [A@žāž@ | ŽāAbāžA@'āābAb^A^ ZāžA { āYbA'āA^aYāžcA^@A bāAY \ 'āžāāAYāZA  
^YŸY \ ~YābāÉAbāžAŪā' | Ž'ā' b [A@žāž@ | ŽāAbāžA@'āābAb^A@ž\* \ 'žāAb \ ŽžābAb^A^ž & ^ | ŽābāžAZ'ā~āY [A^aA  
^āāžāā' | Žā & Ybž@'YāAā \ YāYāA^āAYAZ^@DA { 'āž^ \ DA@žā'ZZāYžA@^A^ & A { YāāDAžbYÉBÉAŠžā'ZZābāāā^ \ āZā^bA  
YbYŸābŪāAb^A { Yāāā'āAYā [A { Y [AbāYbAZY & YāžābāžA { YāāAbā@^ \ āāA & \ ābāāY@ž' | ŽZā^@AY^ābžžAb^AbāžA  
{ YāāāÉA ) SAR R?NC MP N?A I GLE R?NC K?W LMR @C SQCB ML ?LW QSPD?AC GL PMMK QĪ Š^ & AZY & YāžA  
ZZbž@ & 'āžZAY [AbāžAŪā' | Ž'ā' b [Aā^bAb^AYžA@^A^ & Aā^@ & YāA { ŽY@AYāZAbžY@A { 'āāYžAYāāžāāžžAb^AbāžA  
Yāā'āāžžAb^AbāžA@^A^ & É

7MMK QC?PAF ŁāāžāYžāāY@ [DAŠžā'ZZāYžAŌ'āžAāb \ ŽžābābYāaA & Y [Ažābž@AYA^A^ & AYāZā^Yāž@ | Žā { āYbA'āA  
'āA~āY'āA | Ž { ÉARāā [AŠžā'ZZāYžAŌ'āžA~@^āžāā'āYāAbYāaA^@AYA~ž@ā^āAZžā'āāYbžZAY [AbāžANžYāA^A



; ?A?LAGCQ & Y[A^Yÿ\@AZ\ @'áAbáŽA [ŽY@ÉA0aA [^\AY@ŽAáZab { 'báAYA | YÿYáÿ [A' áA [^\@A@^& DA [^\AY@ŽA Ž}~ŽYbŽZAb^A { ŽáY^& ŽAYaáŽ { A@^& & YbŽÉAbá^áŽAa\^áZAb^AYŽAZ'á@Žá~ŽYba \ áAb^A@Žá ZŽáAbááŽŽæ'ááAYA @^& AYáYááZDA' áA^@ZZ@Ab^AZ' áá \ YZZAbáŽ & DA & Y[AÿŽYáY@áZZAa^@AYAY \ [^\bAYáZááŽáAbá@^\ áAbáŽA Tb \ ZŽáAbAN^áZ \ YbAT [ábŽ&É

< C?NMLQ Y@ŽAá^bA~Ž@ & 'bbŽŽÉAUáŽA^@A~^ááŽáá' áA^Aa^@ŽY@ & áDAY & & \ á' b' ^áDAŽ}~á^á' | ŽáDAZYááŽ^\ áA YáŽ & 'YááDAæá' | ŽáAbáYbAZ^Aá^bA & ŽŽbAá~ŽY' a' YÿYb' ááA^@A { ŽY~^ááA^aAYá [Aæ' áZAY@ŽAa^@Y ZZZáA' áA Uá | Ž@á' b [A@Žá ZŽáYŽáÉACE^@AYZZ' b' ^áYáA' áa^@ & Yb' ^áDAáŽŽAbáŽACE' @ŽY@ & áAYáZA Ú ŽY~^ááAS^á' Y [AYbA ább~IÉÉá' bŽáÉáY \ ÉZZ \ ÉZZYá^aáb \ ZŽáAbáÉ~YáŽáÉY^& & \ á' b [ÉábYáZY@ZáÉ' @ŽY@ & áEYáÉ { ŽY~^ááÉ

< GLBMUQ & Y[Aá^bAYŽA \ áŽZAb^AŽáBŽ@A^@AŽ} 'bAYAY \ 'áZ' ááAŽ} YŽ~bA' áAbáŽAYáŽA^aAYáAŽ & Ž@áŽáY [É

# : LGTCPQGRW 5MJGAW ?LB 5PMACBSPCQ MLA 8CVS?J - ?P?QQKCLR

Tb \ ZŽáAbáA { á^AYŽá Ž} ŽAbáŽ [AaY | ŽAYŽŽaA@ŽY' ~ŽáAbá^aAáŽ} \ YáAaY@Yáá & ŽáBAY [AaYÿ \ áb [A^@AábYaa & Ž & YŽ@áDAaá^\ áZA@ZaŽ@Ab^AbáŽAÓ \ & YáAŠŽá^\ @YŽáA { ŽYá' bŽAYbA ább~IÉÉ { ŽY & ŽZ YÉáY \ ÉZZ \ Éá@Éa' áŽáÉÉÉÉÉÉÉÉÉÉ } \ YáÉÓY@Yáá & ŽáBES^á' Y [É~ZaA a^@AYAZZbY áŽŽAŽ} ~áYáYb' ^áA^aAbáŽA~^á' Y [AYáZA~@^YŽZ \ @ŽáAb^Aa^áá^\ { Aa^@A@Žá^á \ b' ^áAb^AbáŽA & YbbŽ@É

Tb \ ZŽáAbáA { á^AYŽá Ž} ŽAbáŽ [AaY | ŽAYŽŽaA@ŽY' ~ŽáAbá^aAáŽ} \ YáAaY@Yáá & ŽáBAY [A^báŽ@Aáb \ ZŽáAbááá^\ áZA & YæŽAYa@Ž~^@bA { 'báA^ááANy@^ááAS^á' YŽANŽ~Y@b & ŽáBÉATŽ} \ YáAaY@Yáá & ŽáBAY [AYAáb \ ZŽáAbá' áA Y' áá' ZŽáZAYa | ^áYb' ^áA^aAbáŽATb \ ZŽáAbAN^AZAYáZA' áAZZá' áZZAY [AbáŽAÓábŽ@~Ž@á^áYáAÚ' ^áŽáYŽAS^á' Y [AYbA ább~IÉÉá' bŽáÉáY \ ÉZZ \ ÉZZYá^aáb \ ZŽáAbáÉ~YáŽáÉY^& & \ á' b [ÉábYáZY@ZáÉ' áBŽ@~Ž@á^áYáE | ^áŽáYŽE~^á' Y [AÉ

## 8KMIGLE 5MJGAW

Ó^ááANy@^ááAUá' | Ž@á' b [A' áAY^& & 'bbŽZAb^A~@^ | 'Z' ááAYaáŽYábá [DAY^& a^@bYÿáŽDAYáZA~@^Z \ Yb' | ŽA Žá | '^á & ŽáBaa^@AbáŽAb \ ZŽáAbáDAaYÿ \ áb [DAYáZáAbYaaDAY^áB@Yÿb^@áDA | ŽáZ^@áDAYáZA | 'á' b^@áA^aAbá' áA Yÿ & ~\ áÉAáPáŽ@Ža^@ŽDAá & ^æ' ááA' áa~@^á' Y' bŽZA' áAYááAY \ 'áZ' áááA^áA \ á' | Ž@á' b [A~@Ž & 'áŽáÉAbáŽ@ŽAY@ŽAá^A ZŽá' ááYbŽZAá & ^æ' ááAY@ŽYáA' áAYá [A \ á' | Ž@á' b [A~@ŽYbŽZAY \ 'áZ' áááÉAOYáAY \ 'áZ' áááAYáA^áŽáŽáB@YáYŽA ZŽá' ááYbŽZAYáAá & ^æŽÉa@ŽŽÉAT & ^æ' ááA { 'bá' áAGÉAaZZbA^aAbáŽA & Y' áAŽáB@YáYŽáA^aA@Žá ZŽáYŽááAYáZA { 'bá' áADGAb^AGÉAaZZbA^aAbáŽAZŽá' ááYbŽZAá & ^æŽÉa@ŽŽAZáB@YáYŽáA^aAbáŽ@A \ á' | Ž@á' b [AY \ 'áZ' ááA' áA ~@^á' Y' bŽZÉ

Ł Yÿ^@Z' ááAb^AbáŽAŁ & Ž@ YÿáAÓ \ ááAŁ áá^Y' b' ^áDAŽ | Ž@ [A [ŽY@A' áAbáŽAUá' bŽZATbYbŽáA^ | Ž@A€ \ ÉDÉÉÉA ~Ž^~áŽAZ' ŽAa@^ & Ab^YÿYÿ^Yÿ \ áŽAZ' áŽYáŽDA & Yæ' ááA' bAbáŽáŽY' ááAYÿ \ áŽA^a~@Ž | ŽáBAYáZáZŽYbáÉA Ł á^báŽ@AGÉÉÉÉÉA~Ž^~áŽAZ' ŽAa@^ & AŽ} ~^á \ @ŽAb^AáŽY^áZáYáZáá & ^æŽÉ

PáŽAUá' | Ž@á' b [A' áAá' ááá [AY^& & 'bbŽZAb^Aá \ ~-@b' ááAYááAb \ ZŽáAbáA { á^A { 'áAb^AAb^~A \ á' áAb^YÿYÿ^ÉA CE^@A' áa^@ & Yb' ^áA^áA@Žá^\ @YŽáAá^Ab^A ább~IÉÉá' bŽáÉáY \ ÉZZ \ É { ŽááZááAÉ

ĀŠOÚÓTONĀŁ \ á \ áBáÉÉDÉÉÉFB



# 8MJGAGR?RGML

T^à'ÿ'bYb'^âA'âAbâžA@Žã'ZZãÿŽâYââA'ãA~@^â'ÿ'bžZAã^AYãAb^A~@^bžÿbA@Žã'ZZãbãAa@^&A\â { Žãÿ^&Žã | 'ã'bãA  
YâZA~^ãã'ÿãŽAâY@Yãã&ŽãbÉARãâ[A@Žã'ZZãÿŽAâYââA^@áYá']Yb'^ããA&Y[Aã^â'ÿ'bã'âAbâž'@A@Žã'ZZãÿŽAYâZA  
bãŽãA^ãâ[A { 'bãAbãžAY~@^ | YãA^aAbãžãžYZA^aAâYããÉY@ŽYÿÿ^@Z'ãYb^@Éÿ^&&\â'b[Aÿ^@Z'ãYb^@É  
T^à'ÿ'bYb'^âA^âAUâ' | Žã'ã'b[A~@^~ž@b[A'ãAãb@'ÿbã[A~@^â'ÿ'bžZA { 'bã^ \bAbãžA~@'^@A~ž@&'ãã'^ãA^aAbãžAÑ'@Žÿb^@A  
^aATb \ZZãbAk.Yb'|b'žãA^@AY~@^~@'YbžAYÿYZZ&'ÿAZžYãA^@AZž~Y@b&žãbããžYÉ