

6]hWc]b 'YfgWX`]Y » h'` * \$? ž'GC @'ghY][h'i a , ı 'fA Uf_Yh'K UhWX Ł

6]hwc]b gwx cgg buwx dcg]h]j Yb 6Yf]wx hyb ui g xyb i G5
]bbYf\uv j cb Ghi bxyb i a fi bx " "\$\$\$ I G!8c``Uf']b x]Y
< O\Y i bx YffY]wx hy ni a YfghYb A U`gY]h 5df]` * \$"\$\$\$ I G!
8c``Uf" 9]b][Y 5`hwc]bg \ Uv Yb g]wx Yv Yb Zu``g xyf : U\fh
Ub[Ygwx`cggYbž k cv Y] x]Y 9H < " ", \$\$ I G8 Øv Yfgh]Y[ii bx
Gc`UbU i a a Y\f U`g', i Ubgh]Y["6H7 ii bx * \$? hfUZYb g]wx
k]Yxyf Bcwx j cf nk Y] HU[Yb k Uf 6]hwc]b ghUf_
ni fØw_[Y[Ub[Yb ii bx ghUbx _i fn xUj cfž ii bhYf') ("\$\$\$ I G!
8c``Uf ni VfYwx Yb "8]Yg [Ygwx U\ buwx Y]bYa YfZc`[`cgYb
J Yfgi Wx ž ni a YfghYb A U`gY]h ii b[YZÀ\f ZØbZ A cbUhYb
), "\$\$\$ I G8 ni Øv Yfk]b x Yb "8]Y 6i ``Yb \ UhhYb Yx cwx bcwx
b]wx h Ui Z[Y[Yv Yb ii bx [YghYfb Y]b Yb k Y]hYfYb
VYY]b x fi w Yb x Yb Y Ua d \ Y`]d/

 $6]hWc]b \cdot gWX \cdot cgg \cdot bUWX \cdot dcg]h]j \cdot Yb \cdot 6Yf]WX \cdot hYb \cdot Ui \cdot g \cdot XYb \cdot I \cdot G5 \cdot]bbYf \setminus U \cdot V \\ j \cdot cb \cdot Ghi \cdot bXYb \cdot i \cdot a \cdot fi \cdot bX \cdot ' \cdot "$$$I \cdot G!8c \cdot `Uf']b \cdot X]Y \cdot < O \setminus Y \cdot i \cdot bX \cdot YffY]WX \cdot hY \\ ni \cdot a \cdot YfghYb \cdot A \cdot U \cdot gY]h \cdot 5df] \cdot \cdot * $"$$$I \cdot G!8c \cdot `Uf'' \cdot 9]b][\cdot Y \cdot 5 \cdot hWc]bg \cdot V \cdot VYb \\ g]WX \cdot YVYbZU \cdot `g \cdot XYf' : U \setminus fh \cdot Ub[\cdot YgWX \cdot cggYb \check{z}'k \cdot cVY] \cdot X]Y \cdot 9H < \cdot \cdot \cdot '', $$ I \cdot G8 \cdot \emptyset V Yfgh]Y[\cdot i \cdot bX \cdot Gc \cdot UbU \cdot i \cdot a \cdot a \cdot Y \setminus f \cdot U \cdot g', I \cdot Ubgh]Y[\cdot '' \cdot '', $$$

6H7 i bX * * \$? hfUZYb g]W k]YXYf

BcW. jcfnk Y] HU[Yb'k Uf'6]hWc]b'ghUf_'ni fØW_[Y[Ub[Yb'ibXghUbX'_ifn'XUjcfž'ibhYf') ("\$\$\$'IG!8c``Uf'ni 'VfYWXYb"'8]Yg
[YgWXU\'bUWX'Y]bYa 'YfZc`[`cgYb'JYfgi WXž'ni a 'YfghYb'A U`'gY]h
ib[YZÀ\f'ZØbZ'AcbUhYb'), "\$\$\$'IG8'ni 'ØVYfk]bXYb"

8]Y'6i ``Yb'\UhhYb'YXcW\'bcW\'b]W\h'Ui Z[Y[YVYb'i bX'[YghYfbY]bYb'k Y]hYfYb'VYY]bXfi W_YbXYb'5i Zgh]Y['Y]b[Y`Y]hYhž'XU' [Ya Y`XYh"'8]Yga U``\Uh'6H7'XUg'cVYb'[YbUbbhY'B]j YUi

ni fØW YfcVYfh'i bX' `YhhYfhY'k Y]hYf'bUWX'cVYb"

6H7 'gh]Y['V]g'Ui Z'), ") \$\$ 'I G8 ž'VYj cf'Y]b'k Y]hYfYg'_i fnYg
FYhfUWYa Ybh']\b'k]YXYf'i bhYf') + "\$\$\$ 'I G8 'hf]YV"'Ni 'X]YgYa
NY]hdi b_h'YXcW\'6Yf]W\hY'Ui Z[YhUi W\h'VY\Ui dhYhž'XUgg'X]Y'I G!
6ÒfgYbUi Zg]W\hgVY\ÒfXY'GYW' f]h]Yg'UbX'9I W\Ub[Y'7ca a]gg]cb
VYfY]hg'bÀW\ghY'K cW\Y'[fØbYg'@]W\h'ZØf'Y]bYb'6]hWc]b!: i hi fYg!
9H: '[YVYb'_ÒbbhY"

8]Y'5i gk]f_i b[Yb'Y]bYf'gc`W.'VYXYi hYbXYb'9bhk]W_`i b[']b'XYb I G5'ZØ\fhYb'ni 'Y]bYa 'gcZcfh][Yb'DfY]gUbgh]Y["'6H7'ZØ[hY'a Y\f U`g'' "\$\$\$'I G!8c``Uf'\]bni 'i bX'YffY]W\hY'ni a 'YfghYb'A U`'gY]h'5df]`X]YgYg'*J\fYg'*\$"\$\$\$'I G!8c``Uf"

6]g'Yhnh'\Uh'6]hWc]b'fi bX'%"\$\$\$'I G!8c``Uf'Ub'K Yfh'j Yf`cfYbž'UVYfgY]bY'A Uf_h_Ud]hU`]g]Yfi b['`]Y[h']a a Yf'bcW\'ØVYf'%\\\%'6]``]cbYb I G!8c``Uf"'8]Y'8ca]bUbn'[Y[YbØVYf'XYb'5`hWc]bg']gh'Ui Z'_bUdd (*i '[Ygh]Y[Yb"

6H7I G8" HfUX]b[J]Yk

9H< 'YffY]W\h'' ž, ? ``. 'GC@'ghY][h'i a ', ı

9h\YfYi a `\UhhY`]b`XYb``YhnhYb`K cW\Yb`ni`_Àa dZYbž`XU`Yg`b]W\h
]b`XYf`@U[Y`k Ufž`X]Y`' "* \$\$!8c``Uf!A Uf_Y`YbhgW\Y]XYbX`ni

ØVYfgW\fY]hYb"'9g`[]b[`gc[Uf`i a `Y]b`dUUf`\i bXYfh`8c``Uf`ni fØW_ž
[]b[`UVYf`[YghYfb`]b`X]Y`CZZYbg]j Y`i bX`gYhnhY`g]W\`\Yi hY`bUW\
BcfXYb`Zcfh"'*bZc`[YXYggYb`VfUW\`X]Y`nk Y]h[fò» hY`?fmdhc`ni a
YfghYb`A U``gY]h`A cbUhYb`ØVYf`' ", \$\$`I G8ž`UVYf`g]Y`k Uf`bi f`j cb
_i fnYf`8Ui Yf`i bX``]Y[h`Yhnh`k]YXYf`XUfi bhYf

 $Gc`UbU']gh'Y]b'kY]hYfYf'VYY]bXfiW_YbXYf'DYfZcfaYf'UiZ'Y]bYf & (!GhibXYb!G_U`U'''GC@']gh'Ub'Y]bYa'HU['ia', 'i'[Ygh]Y[Yb'ibX'']bYa''HU['ia'', 'i']$

k]fX 'XYi h`]W\ 'ØVYf'%* \$ 'I G8 '[Y\UbXY`h"'I b]gk Ud8Yf'5bgh]Y['j cb (ı '\Uh'I B=Ui Z'&* 'I G8 '[Yhf]YVYbž'UVYf'XYf'FYgh'XYf'5`hg'a]h [fÒ» YfYf'A Uf_h_Ud]hU`]g]Yfi b[']gh']bg'Ghc W_Y b'[YfUhYb'cXYf ni fØ W_L [Y[Ub[Yb"

6]bUbWY '7c]bž'7UfXUbcž'F]dd`Yž'Dc`_UXchž'8c[YWc]bž'HYffU'i bX 5; U`UbWXY'g]bX'U``Y'`Y]WXh']a 'fchYb'6YfY]WX"

 $VYfV^{*}W_{0}VYf^{*}XYb^{*}?$ fmd hc k À\fi b[ga Uf_h"'E i Ubh]Zm'7 fmd hc

8]Y'Hcd'%\$\$'XYf'[fÒ»hYb'7c]bg'\UVYb'a]h'Bi7md\Yf'Y]bYb'bYiYb JYfhfYhYf"BI']gh'Ub'Y]bYa'HU['ia'aY\f'U`g')\$\$i 'Yld`cX]Yfh ibX'\Uh'g]W\'&'8c``Uf'[YbÀ\Yfhž'UVYf'j]Y`Y'7caaib]hm!A]h[`]YXYf gdY_i`]YfYb'UiZ'Hk]hhYfž'XUgg'Yg'g]W\'ia'Y]b'Diad!UbX!8iad! GW\YaU'\UbXY`b'_ObbhY" $\label{eq:cbijghia} Dc`m[cbi]ghia `&)`i``Ui Z'%ž*`I G!8c``Uf'[Ygh]Y[Yb"'8]Y'[YgUa hY?fmdhc!A Uf_h_Ud]hU`]g]Yfi b[``]Y[h'ni a `YfghYb'A U``gY]h'A cbUhYb YVYbZU``g'ØVYf'&ž('6]``]cbYb'I G!8c``Ufž'bUWX'Y]bYa '5bgh]Y['i a - $'A]``]UfXYb'I G!8c``Uf'Ub'Y]bYa 'HU["$

. . 11

8 YhU]`g

6Ygi WXYb G]Y i bg Ui Z _fmdhc!bYk g"Uh