

GYb]cf]b^6chhfcd. <]`ZgVYfY]hgWX UZh k]fX a]h 8]YVghU\``VYghfUZh

I bVY_UbbhY`8]YV]b`_`Ui h`GW\a i W_`j cb`6chhfcdYf`GYb]cf]b
]b`]\fYf`K c\bi b["`Dc`]nY]`V]hhYh`i a `<]bk Y]gY`ni `XYa

J cfZU``"

6chhfcd": \$\text{"}\text{brace} \text{"Y]bYa & \text{"OVYffUgWXYbXYb"JcfZU\color=10.6chhfcd"kifXY\color=10.10\colo

 $8 \ Yf' \ J \ cfZU```YfY][\ bYhY'g]WX``Ua``GhUXhhY]``: i \ `YbVfcW_ž'k c'X]Y \\ ++! 'Å \ f][\ Y': fUi``Ua``A]hhk cWX bUWX a]hhU[ž'XYa``&%"`5i [i ghž'i a Yhk U'%' .%) `I \f'Ui Z'Y]bYa``DUf_d`Uhn`` =a '6f]b_a UbbgZY`X 'Y]bY 'I b[Y': fUi``VYa Yf_hYž'X]Y`Ui [YbgWXY]b`]WX`]b``Bch`k Uf"`8]Y HUhj YfXÂWXh][Y'[UV'j cfž'XUgg'X]Y`GYb]cf]b`]\fY'; Y`XVÔfgY j Yf`cfYb`\UVYž'k Ug'XUg'A]h[YZØ\``XYf'A`hYfYb`8 Ua Y'k YW_hY''$

$K] Y X Y f 8] Y V ghU \ ``UV`] Y Z$

5 i gʻ8 Ub_VUf_Y]hʻYbhgWk]YXʻg]WkʻX]YʻI bVY_UbbhYžʻX]Yʻ6chhfcdYf]b ni ʻg]WkʻbUWkʻ< Ui gYʻni ʻVY[`Y]hYb"ʻ \pm bʻX]YgYfʻj Yfa Y]bh`]Wk \]`ZgVYfY]hYbʻG]hi Uh]cbʻVUhʻg]Yʻi a ʻY]bʻ; `UgʻK UggYfʻi bXʻY]bʻGhØW_DUd]Yf"ʻK À\fYbXʻX]YʻGYb]cf]bʻ]bʻXYfʻ?ØWkYʻVYgWkÀZh][hʻk Ufžbi hnhYʻX]YʻI bVY_UbbhYʻX]Yʻ; Y`Y[Yb\Y]hži a ʻ]bgʻGWk`UZn]a a Yfʻni [Y\Yb"`8cfh'bU\a ʻg]YʻGWka i W_ghØW_Yʻa]hʻi bXʻj Yf`]Y»'\Ugh][ʻX]Y K c\bi b["

 $8\,Ug^*J\,Yf\backslash\,U\,\hat{}\,hY\,b^*XYf^*HA\,hY\,f]b^*k^*]fZh^*:\,fU[\,Yb^*Ui\,\,Z^*K^*]Y^*_Ub\,b^*\,Ya^*\,Ub\,X^*gc$

a Ub]di `Uh]j 'j cf[Y\Ybži a 'XUg'J YfhfUi Yb'Y]bYf'\]`ZgVYfY]hYb
DYfgcb'Ui gni bi hnYb3'8]Y'Dc`]nY]'\Uh'X]Y'G]hi Uh]cb'Yfbgh
[Ybca a Yb'i bX'\Uh'gW\bY``Y]bY'I bhYfgi W\i b['Y]b[Y`Y]hYh''
@Y]XYf'YI]gh]YfYb'V]g`Ub['_Y]bY'[YbUi Yb'6YgW\fY]Vi b[Yb'XYf
HÀhYf]bž'k Ug'X]Y': U\bXi b['YfgW\k Yfh''8]Y'6Y\ÒfXYb'V]hhYb
Xf]b[YbX'i a '<]bk Y]gY'j cb'NYi [Ybž'X]Y'Yhk Ug'ØVYf'X]Y
; YgW\Y\b]ggY'k]ggYb'_ObbhYb''

8]Y 6YXYi hi b['XYf'5i Z_`Afi b[

Gc`W\Y'JcfZÀ``Y'g]bX'b]W\h'bi f'ZØf'X]Y'X]fY_h'6YhfcZZYbYbYfgW\fYW_YbXž'gcbXYfb'g]Y'k YfZYb'Ui W\'Y]b'@]W\h'Ui Z'X]YG]W\Yf\Y]hg`U[Y'ZØf'À`hYfY'A YbgW\Yb']b'XYf'; YgY``gW\UZh'''J]Y`YGYb]cfYb'g]bX'XUfUi Z'hfU]b]Yfhž'UbXYfYb'ni '\Y`ZYbž'k Ug']b'X]YgYa: U````Y]XYf'ni ']\fYa 'BUW\hY]``k i fXY'''9g']gh'XU\Yf'k]W\h][ž'XUg6Yk i gghgY]b'ZØf'gc`W\Y'A UgW\Yb'ni 'gW\ÀfZYbž'i a 'ni _ØbZh][YJcfZÀ``Y'ni 'j Yf\]bXYfb"

8 Yf '8]Y VghU\``\ Uh 'Ui W\ 'X]Y ': fU[Y 'Ui Z[Yk cfZYbž'k]Y 'GYb]cfYb VYggYf '[YgW\ Øhnh 'k YfXYb '_ÒbbYbž'VYgcbXYfg ']b ']\ fYb 'Y][YbYb j]Yf 'K ÀbXYb" '5 i Z_`Àfi b['ØVYf '6Yhfi [ga UgW\ Ybž'k]Y 'XUg j cfhÀi gW\ Yb 'Y]bYg 'B chZU``gž'_ÒbbhY 'dchYbn]Y``Y 'C dZYf'XUj cf VYk U\ fYbž'j YfhfUi Ybgj c```Ui Z': fYa XY 'ni ni [Y\Yb"

8 Yf'J cfZU```]b'6chhfcd']gh'Y]bY'YfbØW\hYfbXY'9f]bbYfi b['XUfUbžk]Y'k]W\h]['Yg']ghž'kUW\gUa'ni 'gY]bž'gY`Vgh']b'G]hi Uh]cbYbž'X]YUi Z'XYb'YfghYb'6`]W_'\Ufa `cg'YfgW\Y]bYb"'8]Y'Dc`]nY]'V]hhYh'U``Yž]bgVYgcbXYfY'À`hYfY'A YbgW\Ybž'g_Ydh]gW\'ni 'gY]bž'kYbb'Ya UbXjcb']\bYb'<]`ZY'j Yf`Ub[h"

8]Y'6YhfcZZYbYb'gc``hYb'k]ggYbž'XUgg'g]Y'b]W\h'U``Y]b'g]bXž'i bX'X]Y Dc`]nY]'ni fUhY'n]Y\Ybž'k Ybb']\bYb'Yhk Ug'a Yf_k ØfX]['j cf_ca a h" =a ': U```X]YgYg'8]YVghU\`g']gh'Yg'Xf]b[YbX'[YVchYbž'+bZcfa Uh]cbYb i bhYf'XYf'Bi a a Yf'\$, \$\$'&' *%'%%'k Y]hYfni [YVYb"

8]Y'; YgW\]W\hY'XYf'6chhfcdYf'GYb]cf]b']gh'Y]b'AU\baU`'ZØf'X]Y; YaY]bgW\UZhž'k]Y'k]W\h]['Yg']ghž'5W\hgUa_Y]h'ni 'ØVYb'i bX'g]W\[Y[YbgY]h]['ni 'i bhYfghØhnYb"'\delta'Y]bYf'KY`hž']b'XYf'Yg'`Y]XYf

]a a Yf'k]YXYf'ni '_f]a]bY``Yb'A UWXYbgWXUZhYb'_ca a hž'_Ubb'XUg V`c»Y'6YZc`[Yb'Y]bZUWXYf'Jcfg]WXhga U»bU\a Yb'Y]bYb'[fc»Yb I bhYfgWX]YX'a UWXYb"

<]bhYf[fi bX]bZcfa Uh]cbYb ni a 9]bVfi WXgX]YVghU\`</pre>

9]bVfi W\gX]YVghÀ\`Yž]bgVYgcbXYfY'[Y[Yb'À`hYfY'A YbgW\Ybž'g]bXY]b'k UW\gYbXYg'DfcV`Ya']b'j]Y`Yb'GhÀXhYb"'@Ui h'Y]bYf'Ghi X]Y'XYg 6i bXYg_f]a]bU`Ua hg'fb? 5Ł'ghY``Yb'HÀhYf'ZØf'X]YgY'HUhYb'cZh gdYn]Z]gW\Y'Jcfk ÀbXY'Ui Zž'i a']b'X]Y'K c\bi b[Yb'j cb'GYb]cfYb ni '[Y`Ub[Yb"'8]Yg'[YgW\]Y\h'\Ài Z]['i bhYf'XYa'8YW_a UbhY``XYf <]`ZgVYfY]hgW\UZh'cXYf'Xi fW\'XUg'5b[YVchž'Y]bYb'j Yf`cfYbYb; Y[YbghUbX'ni 'gi W\Yb"'Y`hYfY'A YbgW\Yb'g]bX']b'X]YgYf'<]bg]W\h VYgcbXYfg'[YZÀ\fXYhž'XU'g]Y'cZh'\]`ZgVYfY]h'i bX'k Yb][Yf'g_Ydh]gW\[Y[YbØVYf': fYa XYb'g]bX"

Ni 'XYb'\Ài Z][ghYb'A Yh\cXYb'nÀ\`Yb' GW\cW_Ubfi ZY 'cXYf VYgi W\YbXY'HÀhYfž'X]Y'g]W\'U`g'GhUXhk Yf_Y'cXYf'< UbXk Yf_Yf Ui g[YVYb"'8]YgY'8Y`]_hY'g]bX'b]W\h'bi f'Z]bUbn]Y``gW\ÀX`]W\ž gcbXYfb'`ÒgYb'Ui W\'dgmW\c`c[]gW\Y'6Y`Ughi b[Yb'VY]'XYb'CdZYfb Ui g"'J]Y`Y'GYb]cfYb'ZØ\`Yb'g]W\'bUW\'gc`W\Yb'JcfZÀ``Yb'i bg]W\Yf i bX'ni fØW_[Ync[Ybž'k Ug'g]W\'bY[Uh]j 'Ui Z']\fY'@YVYbgei U`]hÀh Ui gk]f_Yb'_Ubb"

GhUh]gh]_Yb'i bX'U_hi Y``Y'8UhYb'ni K c\bi b[gY]bVfØW\Yb

@Ui h'XYb'U_hi Y``Yb'GhUh]gh]_Yb'XYg'6?5'Ui g'XYa 1 J\f'&\$&&'[UV Yg']b'8Yi hgW\`UbX']bg[YgUa h'fi bX'*, "\$\$\$'K c\bi b[gY]bVfØW\Yž k Ug'Y]bYb'5bgh]Y[']a 1 JYf['Y]W\'ni 1 XYb'Jcf'U\fYb'XUfghY``h" 6YgcbXYfg'VYhfcZZYb'g]bX'`ÀbX`]W\Y'i bX'j cfgh\Xh]gW\Y'; YV]YhYž']bXYbYb'X]Y'Dc']nY]df\AgYbn'cZh'[Yf]b[Yf']gh"'5i W\'XYf'5bhY]`'XYfHUhYbž'X]Y'[Y[Yb'\A`hYfY'AYbgW\Yb'[Yf]W\hYhg]bXž'nY][h'Y]bYbVygcf[b]gYffY[YbXYb'HfYbX"'Gc'[UVYb'' \$i 1 XYf'VYZfU[hYbC']VjbYbVygcf[b]gYffY[YbXYb'HfYbX"'Gc'[UVYb'' \$i 1 XYf'VYZfU[hYbC']VjbYbVygcf[b]gYffY[YbXYb'HfYbX"'Gc'[UVYb'' \$i 1 XYf'VYZfU[hYbC']Vyf'']bXYb'HfYbX"''Gc'[UVYb'' \$i 1 XYf'VYZfU[hYbC']Vyf'''

8]Y '6? 5!GhUh]gh]_ 'nY][hž'XUgg']b 'ØVYf'Y]bYa '8f]hhY` 'XYf': À``Y 'X]Y 9]bVfYWXYf'Xi fWX 'XUg'?`]b[Y`b'Ub'XYf'K c\bi b[ghØf'Ui Z'g]WX Ui Za Yf_gUa 'a UWXYbž'i a 'g]WX 'Y]b'6]`X'j cb'XYf'5_h]j]hÀh']a < Ui g\U`h'ni 'a UWXYb"'8]Yg'j YfXYi h`]WXhž'k]Y'k]WXh]['Yg']ghž'XUgg]bgVYgcbXYfY'GYb]cfYb'Ui Z'j YfXÀWXh][Y'G]hi Uh]cbYb'UWXhYb'i bXghYhg'a]gghfUi]gWX'[Y[YbØVYf'i bVY_UbbhYb'DYfgcbYb'V`Y]VYb"

<]ghcf]gWX Y 'DUfU``Y`Yb 'ni 'À\b`]WX Yb J cfZÀ``Yb</pre>

9]b k Y]hYfYg 6Y]gd]Y`ZØf À\b`]W\Y'J cfZÀ``Y'ZUbXYb g]W\']b XYb
ZfØ\Yb &\$\$\$Yf *J\fYbž'U`g'Y]bY'K Y``Y'j cb 'Hf]W_VYhfØ[YfY]Yb 'X]Y
GYb]cfYb]b j YfgW\]YXYbYb XYi hgW\Yb 'GhÀXhYb' [Yhfc ZZYb'\Uh"
J]Y`Y'HÀhYf'U[]YfhYb'\]Yf'i bhYf'XYa 'J cfk UbXž'ZØf
K c\`hÀh][_Y]hgcf[Ub]gUh]cbYb 'GdYbXYb'ni 'gUa a Y`b'cXYf'UbXYfY
j Yfa Y]bh`]W\'bØhn`]W\Y'8]Ybgh`Y]ghi b[Yb'Ubni V]YhYb"'9]b
VYa Yf_Ybgk YfhYf'I bhYfgW\]YX'ni 'U_hi Y``Yb': À``Yb']ghž'XUgg'X]Y
HÀhYf'XUa U`g'cZh']b'; fi ddYb'Ui ZhfUhYbž'k À\fYbX'\Yi hY'\Ài Z][
9]bnY`dYfgcbYb'U[]YfYb"'8]Yg'_ObbhY'XUfUi Z'\]bk Y]gYbž'XUgg'g]W\
X]Y'?f]a]bU`]hÀhga i ghYf']a '@Ui Z'XYf'NY]h'j YfÀbXYfh'\UVYbž'k Ug

8]Y'FYU_h]cbYb'XYf'² ZZYbh`]W_Y]hi bX'XYf'Dc`]nY]'Ui Z'gc`W\Y
J cfZÀ``Y'\UVYb'g]W\'YVYbZU``g'[Yk UbXY`h": fØ\Yf'k i fXYb'j]Y`Y
: À``Y'j cb'GYb]cfYb'b]W\h'Yfbgh'[Ybca a Ybž'k À\fYbX'\Yi hY
5i Z_`Àfi b[gUfVY]h'i bX'? Ua dU[bYb'ni f'GYbg]V]`]g]Yfi b[
Xi fW\[YZØ\fh'k YfXYbž'i a 'X]YgY'N]Y`[fi ddY'VYggYf'ni 'gW\ØhnYb"
8]Y'[Y`Y]ghYhY'Dc`]nY]UfVY]h'\Uh'g]W\'j YfVYggYfhž'i a 'gW\bY``Ui Z
A Y`Xi b[Yb'ni 'fYU[]YfYb'i bX'[fØbX`]W\Y'9fa]hh`i b[Yb
Y]bni `Y]hYbž'k Ug'XYb'6YhfcZZYbYb'\]`Zhž'XUg'J YfhfUi Yb']b'X]Y
G]W\Yf\Y]hq_fÀZhY'k]YXYf\Yfni ghY``Yb"

6 Ygi WX Yb 'G]Y 'i bg 'Ui Z. 'b!U["XY