: `cf]XU'DUbh\Yfg'5]a 'Zcf'; `cfm']b'<][\! GhU_Yg'; Ua Y'* 'G\ck Xck b°

H\Y`:`cf]XU`DUbh\Yfgž``YX`Vm`7cUW\`DUi``AUif]WYž'U]a 'Zcf j]Whcfm`]b`; UaY`*`cZ`h\Y`GhUb`Ym`7id`D`UmcZZgž'Vi]`X]b[`cb dUgh`YIdYf]YbWYg"



: `cf]XUž'I G5 '! 'H\Y': `cf]XU'DUbh\Yfgž'W\Ua d]cbg'cZ'h\Y'GhUb`Ym 7i d'Zcf'h\Y'Z]fgh'h]a Y']b'ZfUbW\]gY'\]ghcfmž'UfY'ghUf]b['Xck b'U Wf]h]WU``; Ua Y'*']b'h\Y]f'W ffYbh'd`UmcZ'di fgi]h"'H\YfY g'U dU`dUV`Y'a]L'cZ'Ubh]W]dUh]cb'UbX'XYhYfa]bUh]cb'Ug'h\Ym'ZUWY'cZZ U[U]bgh'U'Zcfa]XUV`Y'cddcbYbhž'h\Y'9Xa cbhcb'C]`Yfg"'7cUW\'DUi ` A Ui f]WYž'U'd]j chU``Z][i fY'g\Ud]b['h\Y'hYUa g']XYbh]hmž Ya d\Ug]nYg'h\Y']a dcfhUbWY'cZ'a YbhU``fYg]`]YbWY'UbX'h\Y W\UfUWhYf'cZ'\]g'd`UmYfg']b'bUj][Uh]b['h\YgY'\][\!ghU_Yg a ca Ybhg"'5WWcfX]b['hc'A chcW]W]ga cž'A Ui f]WY']bg]ghg'h\Uh'h\Y 'Yggcbg'YUfbYX'Zfca 'h\Y'hYUa g'dfYj]ci g'd`UmcZZ'YI dYf]YbW'g UfY']bj U`i UV`Yž'YgdYW]U``m'Ug'h\Ym'dfYdUfY'hc'a cj Y'Zcfk UfX'Zfca h\Y'g\UXck g'cZ'h\Y]f'dUgh'ZU'`i fYg" FYZYWh]b['cb'h\Y]f'd`UmcZZ'\]ghcfmž'h\Y'DUbh\Yfg'\Uj Y'ZUWYX g][b]Z]WUbh'dfYggi fYž'dUfh]W'`Uf`m'UZhYf'`cg]b[']b'h\Y'&\$&'`GhUb`Ym 7i d`:]bU``U[U]bgh'h\Y'JY[Ug'; c`XYb'?b][\hg"'MYhž'h\Ymj Y'g\ck b fYa Uf_UV`Y'[fck h\`UbX'fYg]`]YbWYž'k \]W\`A Ui f]WY'U]a g'hc'YI d`c]h ghfUhY[]WU``m"'=b'dfYj]ci g'a UhW\i dgž'`]_Y'h\Y'\UfX!Zci [\h'VUhh`Y U[U]bgh'h\Y'C]`Yfg'k \YfY'h\Ym'fU``]YX'Zfca 'VY\]bX'hc'k]b']b Xci V`Y'cj Yfh]a Yž'h\Y'DUbh\Yfg'X]gd`UmYX'h\Y]f'UV]`]hm'hc'h\f]j Y i bXYf'dfYggi fY U'hfU]h'h\Uh'\Ug'VYYb'WYbhfU``hc'h\Y]f'gi WW'gg h\]g'dcghgYUgcb"'H\Y'DU`a '6YUW\'Dcgh'fYdcfhg'h\Uh'A Ui f]WY VY`]Yj Yg']hg'Wfi W]U`'Zcf'h\Y'hYUa 'hc'X]gW'gg'UbX'fYZYWh'cb'h\Y]f dUgh'YI dYf]YbWYg'hc'\UfbYgg'h\Y]f'dchYbh]U`'Z ``m"

@Yggcbg[·]Zfca [·]h\Y[·]DUgh

H\Y`DUbh\Yfg`WUdhU]bž`5`Y_gUbXYf`6Uf_cjž`fYWYbh`m`[UfbYfYX hk c`dfYgh][]ci g`B < @`Uk UfXgž`g\]b]b[`U``][\h`cb`h\Y`hYUa_g [fck]b[`hU`Ybh"`I_bXYf`A_Ui f]WY g`[i]XUbWYž`\Y g`VYWca_Y`U`j]hU` `YUXYf`cb`UbX`cZZ`h\Y`]WYž`\Y`d]b[`hc`ZcghYf`U`WUa_UfUXYf]Y`h\Uh fYgcbUhYg`h\fci [\ci h`h\Y``cW_Yf`fcca "`A_Ui f]WY`\Ug`U`_bUW_`Zcf WfYUh]b[`Ub`i dVYUh`Uha_cgd\YfYž`Yj Yb`]b`\][\!dfYggi fY`gWYbUf]cg k \]`Y`fYZYfYbW]b[`h\Y``cW_Yf`fcca 'j]VYg`Xi f]b[`a_ca_Ybhg`cZ UXj Yfg]hm'`A_Uhh\Yk_`H_UWXi__bchYX`h\Uh`XYgd]hY`h\Y`ghfYggž`h\Y a_ccX`fYa_U]bYX`_i dVYUh`UbX`Zi b_`Xi f]b[`Wf]h]WU``[Ua_Ygž Ya_d\Ug]n]b[`h\Y`hYUa_g`i bk_Uj Yf]b[`gd]f]h"

5g'h\Y'DUbh\Yfg'[YUf'i d'Zcf'h\Y]f'bYI h'[Ua Yž'h\Ym'UfY'gYY_]b['hc W&UbbY``h\Y'bYfj Yg'cZ``Ugh'mYUf g'd`UmcZZ'fi b']bhc'U'ghfYb[h\" A Ui f]WY g'UddfcUW\']bWi XYg'a U]bhU]b]b['Wca dcgi fY'Ua]X W&Ucgž'dfYdUf]b['Zcf'h\Y'i bdfYX]WhUV`Y'bUhi fY'cZ'd`UmcZZ`\cW_Ym" <]g'ghfUhY[m'Ya d\Ug]nYg'dfYW]gY'YI YW'h]cb'cZ'h\Y]f'[Ua Y'd`Ub k \]`Y'_YYd]b['h\Y'hYUa '[fci bXYXž'U'd\]`cgcd\m'h\Uh'fYgcbUhYg YgdYW]U``m']b'h\Y'ZYj Yf!d]hW\YX'W]a UhY'cZ': `cf]XU g`\cW_Ym'gWfbY"

H\Y`DckYf`cZ`DgmW\c`c[m`]b`Gdcfhg

H\Y`]bWfYUg]b[`]bhY[fUh]cb`cZ`gdcfhg`dgmW&c`c[m`]bhc`\cW_Ym`]g`U hfYbX`h\Uh`WUb h`VY`cj Yf`cc_YX"`=hg`bch`f gh`UVci h`d\mg]WU` dfck Ygg`Vi h`a YbhU``Zcfh]hi XY"`DgmW&c`c[]ghg``]_Y`<Ybfm`UfY`bck $\label{eq:started_st$

5g'h\Y'DUbh\Yfg'dfYdUfY'Zcf'h\]g'd]jchU``aUhW\idžcbY'h\]b[ghUbXg'WYUf.'h\Y]f'^cifbYm'hfUbgWYbXg'^igh'k]bb]b['[UaYg"'H\Ym Ugd]fY'hc'W'`h]jUhY'U'W'`hifY'cZ'fYg]`]YbWYž'ZcW'g]b['cb'Vch\ giWWYgg'UbX'dYfgcbU``[fckh\"'H\Y]f'UV]`]hm'hc'ZUWY'h\Y'[\cghg'cZ d`UmcZZ'dUgh'aUm'jYfm'kY``]bZiYbWY'bch'cb`m'h\]g'gYUgcbg YZZcfhg'Vih'U`gc'h\Y]f'X]fYWh]cb']b'mYUfg'hc'WcaY"

8YhU]`g	
Cfh	: `cf]XUžil G5
EiY``Yb	• a chcW]W]ga c"dh • k k k "dU`a VYUW\dcgh"Wca • k k k "b∖`"Wca

6Ygi WXYb'G]Y'i bg'Ui Z'a Y]b!k]Yb"bYh