Mathematical language	English File language	ZL Picture File language
$[e^{i\sum_{b1,b0}\theta_{b_1b_0}P_{b_1b_0}(2,1)}]n(0)$ where $\theta_{b_1b_0}$ same as for MP_Y	`DIAG IF 2:1 1:0 0T BY 30.0 10.5 11.0 83.1`	`|   %---%---@`
$H(1)^{\overline{n}(3)n(2)}$	`HAD2 AT 1 IF 3F 2T`	`0---@---H   |`
Begin "if measured" block of gates, execute block if measured that qubit 3 is False and 2 is True	`IF_M( 3F 2T ){`	`IF_M( 3F 2T ){`
End "if measured" block of gates	`}IF_M`	`}IF_M`
Loop named 5 with 2 repetitions	`LOOP 5 NREPS= 2`	`LOOP 5 NREPS= 2`
Measure $\overline{n}=P_0=|0\rangle\langle0|$ at qubit 1	`MEAS 0 AT 1`	`|   |   M0   |`
Measure $n=P_1=|1\rangle\langle1|$ at qubit 1	`MEAS 1 AT 1`	`|   |   M1   |`
Measure both $|0\rangle\langle0|$ and $|1\rangle\langle1|$ at qubit 1 New state is mixture.	`MEAS 2 AT 1`	`|   |   M   |`
$[e^{i\sum_{b1,b0}\theta_{b_1b_0}\sigma_Y(3)P_{b_1b_0}(2,1)}]n(0)$ where $P_{b_1,b_0}=P_{b_1}P_{b_0}$ and $\begin{cases}\theta_{00}=30.0(\frac{\pi}{180})\\\theta_{01}=10.5(\frac{\pi}{180})\\\theta_{10}=11.0(\frac{\pi}{180})\\\theta_{11}=83.1(\frac{\pi}{180})\end{cases}$	`MP_Y AT 3 IF 2:1 1:0 0T BY 30.0 10.5 11.0 83.1`	`|   Ry--%---%---@`
Next iteration of loop named 5	`NEXT 5`	`NEXT 5`
A one line comment	`NOTA  bla, bla, bla`	`NOTA  bla, bla, bla`
$e^{i42.7\frac{\pi}{180}\overline{n}(3)n(2)}$	`P0PH 42.7 AT 3 IF 2T`	`0P--@   |   |`
$e^{i42.7\frac{\pi}{180}n(3)n(2)}$	`P1PH 42.7 AT 3 IF 2T`	`@P--@   |   |`
$e^{i42.7\frac{\pi}{180}\overline{n}(3)n(2)}$	`PHAS 42.7 AT 0 IF 3F 2T`	`0---@---+--Ph`
Simulator prints the current state vec in style V1	`PRINT  V1`	`PRINT  V1`
$\left(e^{i\frac{\pi}{180}23.7\sigma_X(1)}\right)^{\overline{n}(3)n(2)}$	`ROTX 23.7 AT 1 IF 3F 2T`	`0---@---Rx   |`
$\left(e^{i\frac{\pi}{180}23.7\sigma_Y(1)}\right)^{\overline{n}(3)n(2)}$	`ROTY 23.7 AT 1 IF 3F 2T`	`0---@---Ry   |`
$\left(e^{i\frac{\pi}{180}23.7\sigma_Z(1)}\right)^{\overline{n}(3)n(2)}$	`ROTZ 23.7 AT 1 IF 3F 2T`	`0---@---Rz   |`
$\left(e^{i\frac{\pi}{180}[30\sigma_X(1)+40\sigma_Y(1)+11\sigma_Z(1)]}\right)^{\overline{n}(3)n(2)}$	`ROTN 30.0 40.0 11.0 AT 1 IF 3F 2T`	`0---@---R   |`
$\sigma_X(1)^{\overline{n}(3)n(2)}$	`SIGX AT 1 IF 3F 2T`	`0---@---X   |`
$\sigma_Y(1)^{\overline{n}(3)n(2)}$	`SIGY AT 1 IF 3F 2T`	`0---@---Y   |`
$\sigma_Z(1)^{\overline{n}(3)n(2)}$	`SIGZ AT 1 IF 3F 2T`	`0---@---Z   |`
$SWAP(1,0)^{\overline{n}(3)n(2)}$ where $SWAP=diag(1,\sigma_X,1)$	`SWAP 1 0 IF 3F 2T`	`0---@---<--->`
$diag(1,U2,1)(1,0)^{\overline{n}(3)n(2)}$ where $U2=e^{i\frac{\pi}{180}[5+30\sigma_X]}$	`SWAY 1 0 BY 5.0 30.0 IF 3F 2T`	`0---@---<<->>`
$\left(e^{i\frac{\pi}{180}[5+30\sigma_X(1)+40\sigma_Y(1)+11\sigma_Z(1)]}\right)^{\overline{n}(3)n(2)}$	`U_2_ 5.0 30.0 40.0 11.0 AT 1 IF 3F 2T`	`0---@---U   |`