

Mathematical language	English File language	ZL Picture File language
$[e^{i \sum_{b_1, b_0} \theta_{b_1 b_0} P_{b_1 b_0}(2,1)}]_{n(0)}$ where $\theta_{b_1 b_0}$ same as for MP_Y	DIAG IF 2:1 1:0 OT BY 30.0 10.5 11.0 83.1	%---%---@
$H(1)^{\bar{n}(3)n(2)}$	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 $\bar{n} = P_0 =  0\rangle\langle 0 $ at qubit 1	MEAS 0 AT 1	M0
Measure $n = P_1 =  1\rangle\langle 1 $ at qubit 1	MEAS 1 AT 1	M1
Measure both $ 0\rangle\langle 0 $ and $ 1\rangle\langle 1 $ at qubit 1 New state is mixture.	MEAS 2 AT 1	M
$[e^{i \sum_{b_1, b_0} \theta_{b_1 b_0} \sigma_Y(3) P_{b_1 b_0}(2,1)}]_{n(0)}$ 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 OT 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
$e^{i42.7 \frac{\pi}{180} \bar{n}(3)n(2)}$	POPH 42.7 AT 3 IF 2T	OP--@
$e^{i42.7 \frac{\pi}{180} n(3)n(2)}$	P1PH 42.7 AT 3 IF 2T	@P--@
$e^{i42.7 \frac{\pi}{180} \bar{n}(3)n(2)}$	PHAS 42.7 AT 0 IF 3F 2T	0---@---+---Ph
Simulator prints the current state vec in style V1	PRINT V1	PRINT V1
$(e^{i \frac{\pi}{180} 23.7 \sigma_X(1)})^{\bar{n}(3)n(2)}$	ROTX 23.7 AT 1 IF 3F 2T	0---@---Rx
$(e^{i \frac{\pi}{180} 23.7 \sigma_Y(1)})^{\bar{n}(3)n(2)}$	ROTY 23.7 AT 1 IF 3F 2T	0---@---Ry
$(e^{i \frac{\pi}{180} 23.7 \sigma_Z(1)})^{\bar{n}(3)n(2)}$	ROTZ 23.7 AT 1 IF 3F 2T	0---@---Rz
$(e^{i \frac{\pi}{180} [30\sigma_X(1)+40\sigma_Y(1)+11\sigma_Z(1)]})^{\bar{n}(3)n(2)}$	ROTN 30.0 40.0 11.0 AT 1 IF 3F 2T	0---@---R
$\sigma_X(1)^{\bar{n}(3)n(2)}$	SIGX AT 1 IF 3F 2T	0---@---X
$\sigma_Y(1)^{\bar{n}(3)n(2)}$	SIGY AT 1 IF 3F 2T	0---@---Y
$\sigma_Z(1)^{\bar{n}(3)n(2)}$	SIGZ AT 1 IF 3F 2T	0---@---Z
$SWAP(1,0)^{\bar{n}(3)n(2)}$ where $SWAP=diag(1, \sigma_X, 1)$	SWAP 1 0 IF 3F 2T	0---@---<--->
$diag(1, U_2, 1)(1,0)^{\bar{n}(3)n(2)}$ where $U_2=e^{i \frac{\pi}{180} [5+30\sigma_X+0.0\sigma_Y+11\sigma_Z]}$	SWAY 1 0 BY 5.0 30.0 0.0 11.0 IF 3F 2T	0---@---<<->>
$(e^{i \frac{\pi}{180} [5+30\sigma_X(1)+40\sigma_Y(1)+11\sigma_Z(1)]})^{\bar{n}(3)n(2)}$	U_2_ 5.0 30.0 40.0 11.0 AT 1 IF 3F 2T	0---@---U