

State	Input	Transition
q0	0	q1, #, R
q0	x	q _{reject} , x, R
q0	#	q _r , #, R
q1	0	q3, x, R
q1	x	q1, x, R
q1	#	q _{accept} , #, R
q2	0	q2, 0, L
q2	x	q2, x, L
q2	#	q1, #, R
q3	0	q4, 0, R
q3	x	q3, x, R
q3	#	q2, #, L
q4	0	q3, x, R
q4	x	q4, x, R
q4	#	q _{reject} , #, R

In the Transition Function, 'q0' is the start state, 'q_{accept}' is the accept state and 'q_{reject}' is the reject state. Trace the execution of this Turing machine with the string **0000#** as input. Note that '#' represents the blank symbol