

4.) MOORE FSM , detect 110 or 101 in input

States: out

$q_0 = \emptyset$ 0

$q_1 = 1$ 0

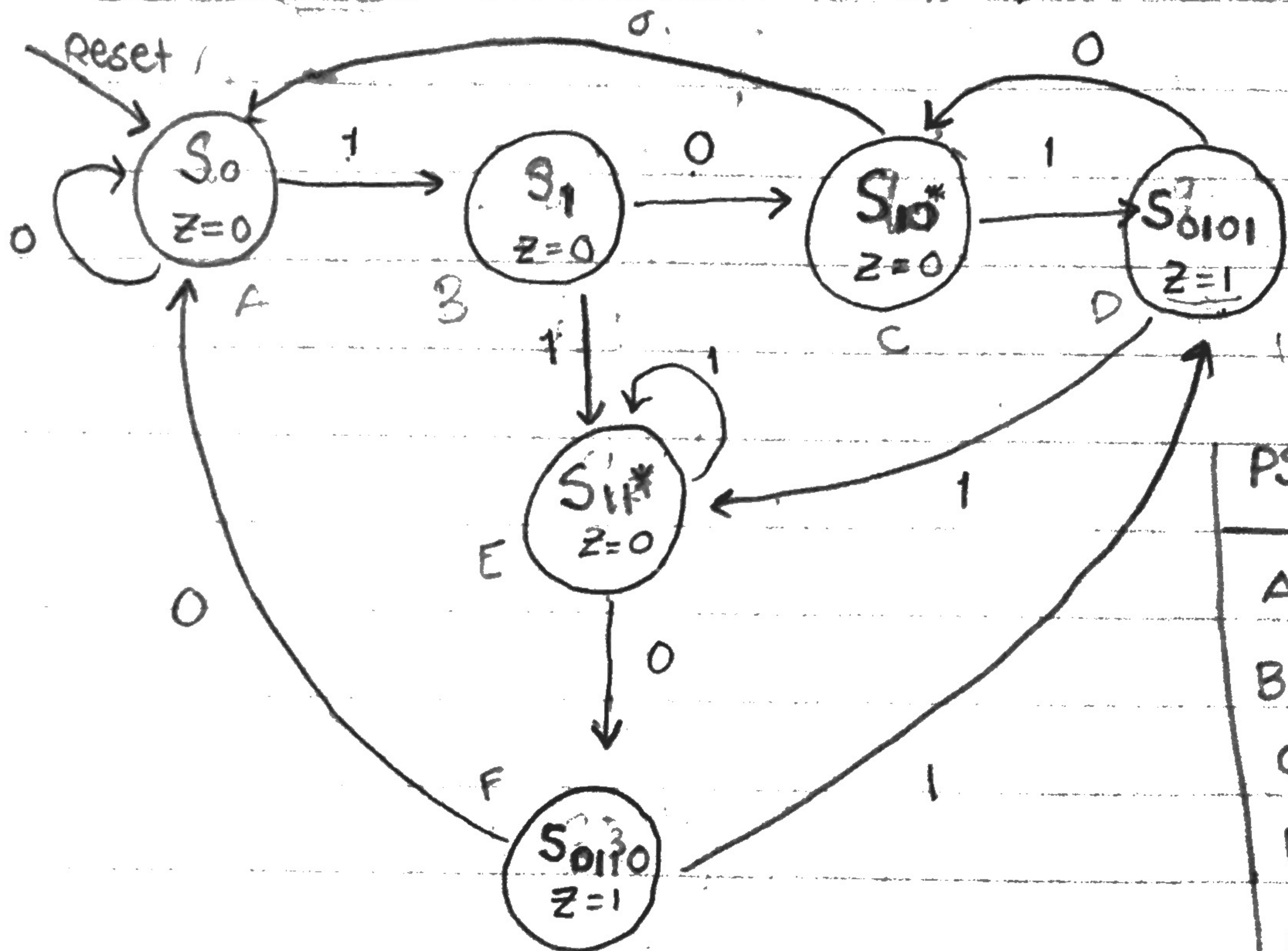
$q_2 = 11$ 0

$q_3 = 110 \rightarrow 1$

$q_4 = 10$ 0

$q_5 = 101 \rightarrow 1$

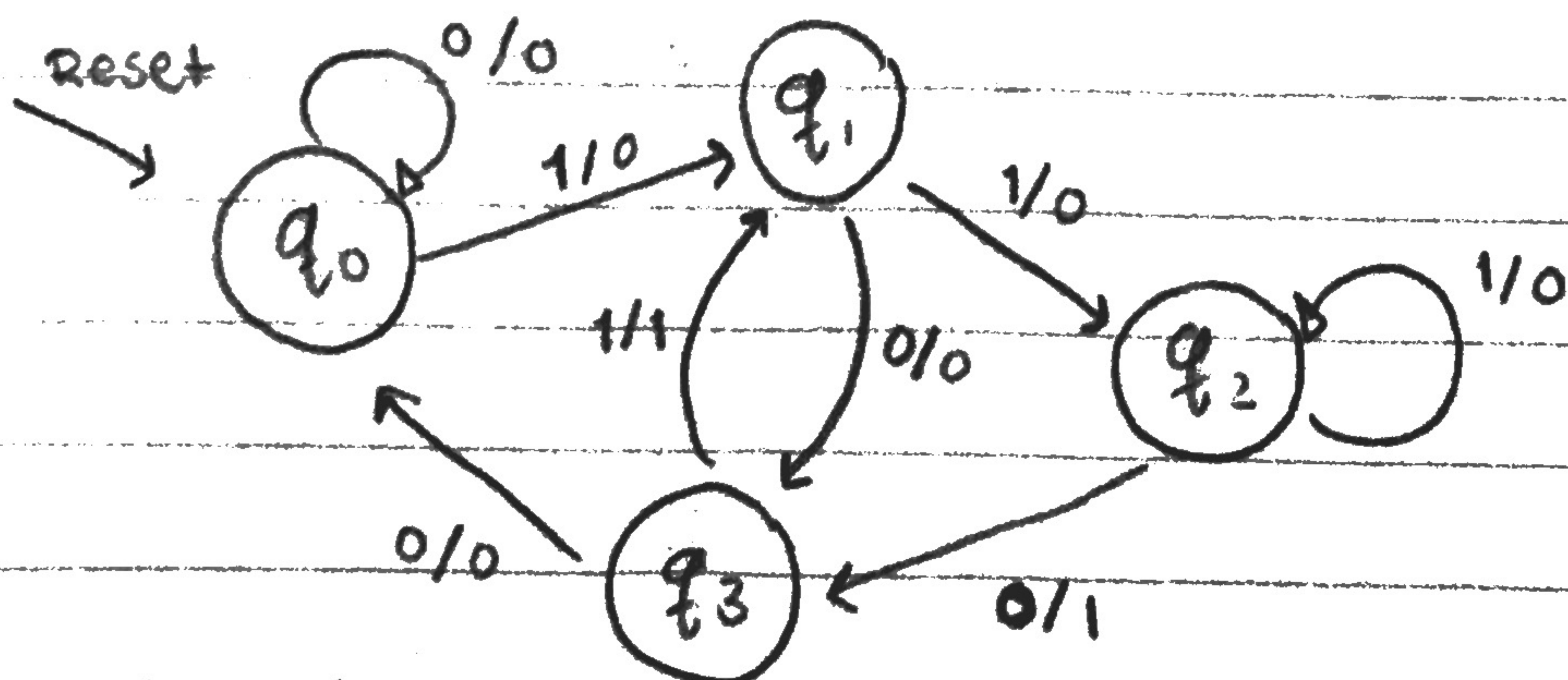
Q	Q _n @0	Q _n @1	Out
S ₀	S ₀	S ₁	0
S ₁	S ₁₀ *	S ₁₁ *	0
S ₁₁ *	S ₀₁₁₀	S ₁₁ *	0
S ₀₁₁₀	S ₀	S ₀₁₀₁	1 ←
S ₁₀ *	S ₀	S ₀₁₀₁	0
S ₀₁₀₁	S ₁₀ *	S ₁₁ *	1 ←



101 110
101110
out 0001001

PS	NS 0	NS 1	Out
A	A	B	0
B	C	E	0
C	A	D	1
D	C	E	0
E	F	E	0
F	A	D	1

5.) Mealy Model FSM ... detect 110 or 101 in input



Q	Q _n @0	Q _n @1	out @0@1
q ₀	q ₀	q ₁	0 0
q ₁	q ₃	q ₂	0 1
q ₂	q ₃	q ₂	1 0
q ₃	q ₀	q ₁	0 1