① (a) Design a DFA which accepts $L(M) = \{w \mid w \in \{0,1\}^*\}$ and w is a str that does not contain consecutive 1's.

(b) Design a DFA, the language recognize $L = \{a^n b \mid n \geq 0\}$

$$L = \{a^n b \mid n \geq 0\}$$

the language recognize by automata being

② Construct the DFA from given NFA

Construct the DFA from given NFA

Present State	Next State (0)	Next State (1)
→ q_0	q_0, q_1	q_0
q_1	q_2	q_1
q_2	q_3	q_3
q_3	—	q_2

Good Write ③

Ans. Convert
~~Construct~~ NFA with ε moves to its DFA
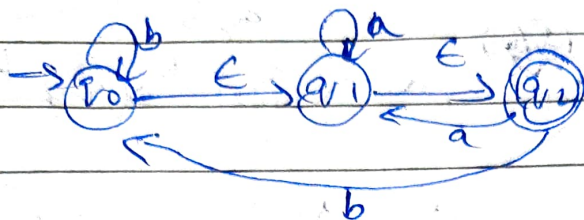
Ques. find melay machine eq. to following moore machine

Present	Next(0)	Next(1)	Output
q_0	q_3	q_1	0
q_1	q_1	q_2	1
q_2	q_2	q_3	0
q_3	q_3	q_0	0

5) (a) Diff. b/w DFA & NFA

(b) Construct Minimum State Automata equivalent to finite automata given in Diagram.