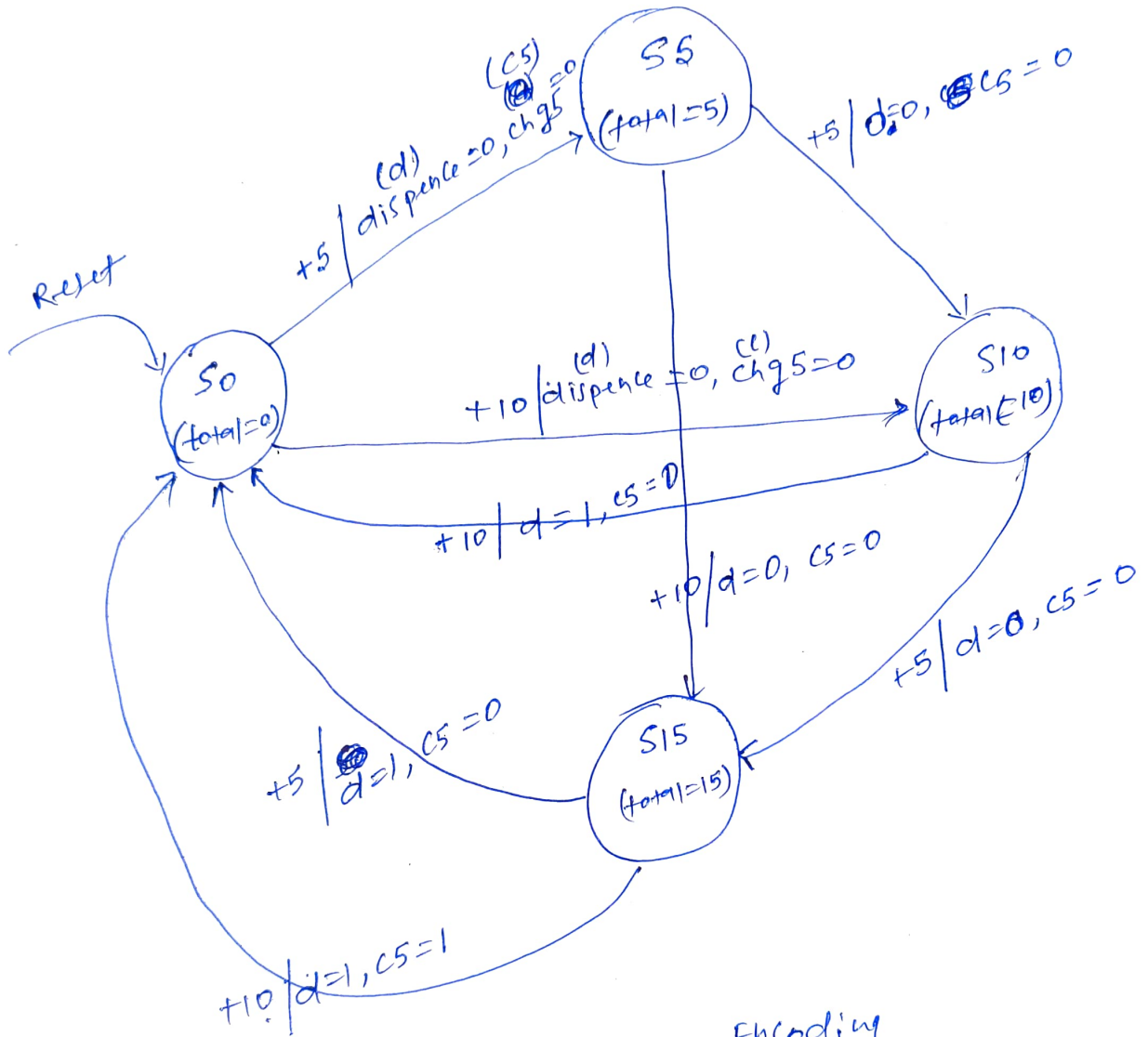


# problem 3 vending

## mealy fsm state transition diagram



state	encoding
S0	00
S5	01
S10	10
S15	11

# FSM Output Table

<del>FSM</del> Current State	Input (Coin)	Next State	Outputs <u>d</u> , <u>cs</u> 0,0
S <sub>0</sub>	5	S <sub>5</sub>	(dispen, chgs)
S <sub>0</sub>	10	S <sub>10</sub>	0,0
S <sub>5</sub>	5	S <sub>10</sub>	0,0
S <sub>5</sub>	10	S <sub>15</sub>	0,0
S <sub>10</sub>	5	S <sub>15</sub>	0,0
S <sub>10</sub>	10	S <sub>0</sub>	1,0
S <sub>15</sub>	5	S <sub>0</sub>	1,0
S <sub>15</sub>	10	S <sub>0</sub>	1,1