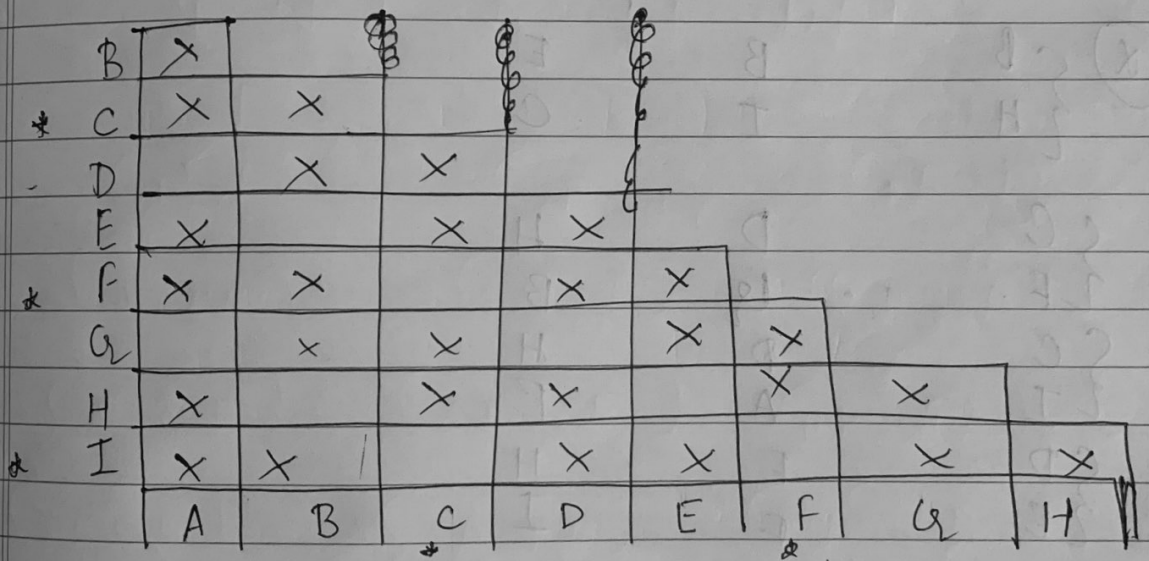
Sakshi Srivastava

(1)

S	O	1
A	B	E
B	C	F
C	D	G H
D	E	H
E	F	I
F	G	B
G	H	B
H	I	C
I	A	E



Combinations :-

{ A	B	E
{ B	C	F
{ A	B	E
{ D	E	H
{ A	B	E
{ E	F	I

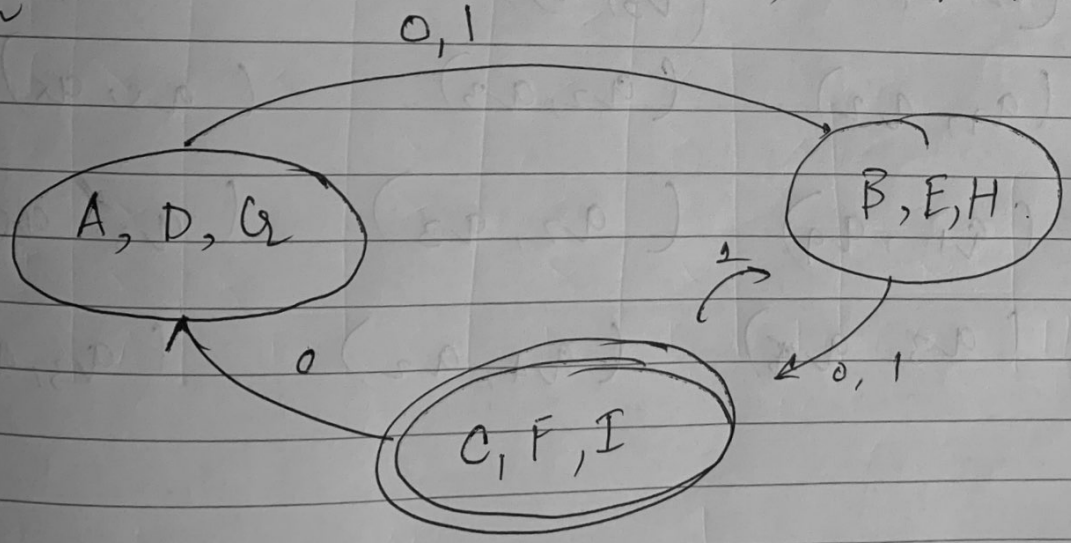
	0	1
A	B	E
G	H	B
A	B	E
H	I	C
B	C	F
D	E	H
B	C	F
E	F	I
B	B	E
G	H	B
B	B	E
H	I	C
C	D	H
F	G	B
C	D	H
I	A	E
D	E	H
E	F	I
D	E	H
G	H	B
D	E	H
H	I	C

	0	1
✗ E	F	I
Q	H	B
E	F	I
H	I	C
✗ Q	H	B
H	I	C

Following pairs

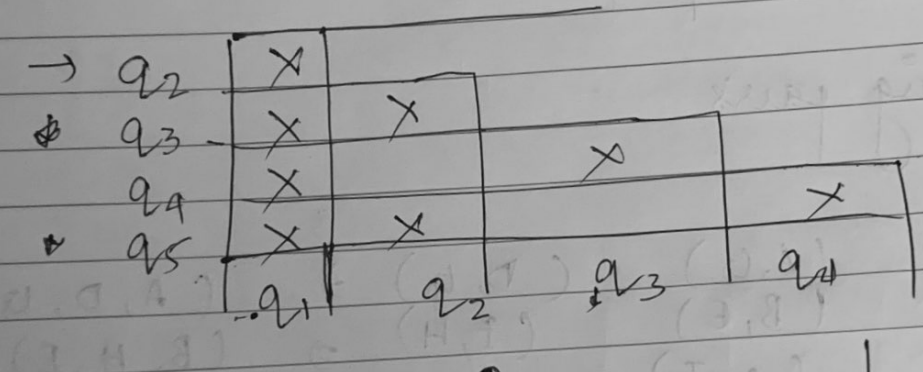
(A, D)	(A, Q)	(D, Q)	⇒	(A, D, Q)
(B, H)	(B, E)	(E, H)	⇒	(B, H, E)
(C, F)	(C, I)	(F, I)	⇒	(C, F, I)
	(D, H)		⇒	(D, H)

Diagram



(Q)

δ	0	1
→ q_1	q_2	q_3
q_2	q_3	q_5
* q_3	q_4	q_3
q_4	q_3	q_5
* q_5	q_2	q_5



Pairs	0	1
✓ (q_2, q_4)	(q_3, q_3)	(q_5, q_5)
(q_1, q_2)	(q_2, q_3)	(q_3, q_5)
✓ (q_1, q_4)	(q_2, q_3)	(q_3, q_5)
(q_3, q_5)	(q_4, q_2)	(q_3, q_5)

(q_2, q_4)
(q_3, q_5)

(q_2, q_4) is equivalent because they reach same destination

DFA