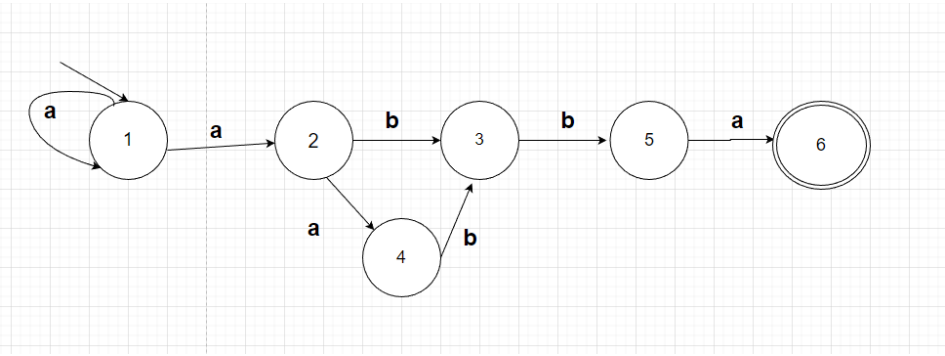
Lab #3

Construct an equivalent deterministic finite automaton for the given non-deterministic finite automaton with 6 states.

A = { a, b} , V = { 1, 2, 3 , 4, 5 , 6, 7}



Initial state: H={1} , **Final states:** F={6}

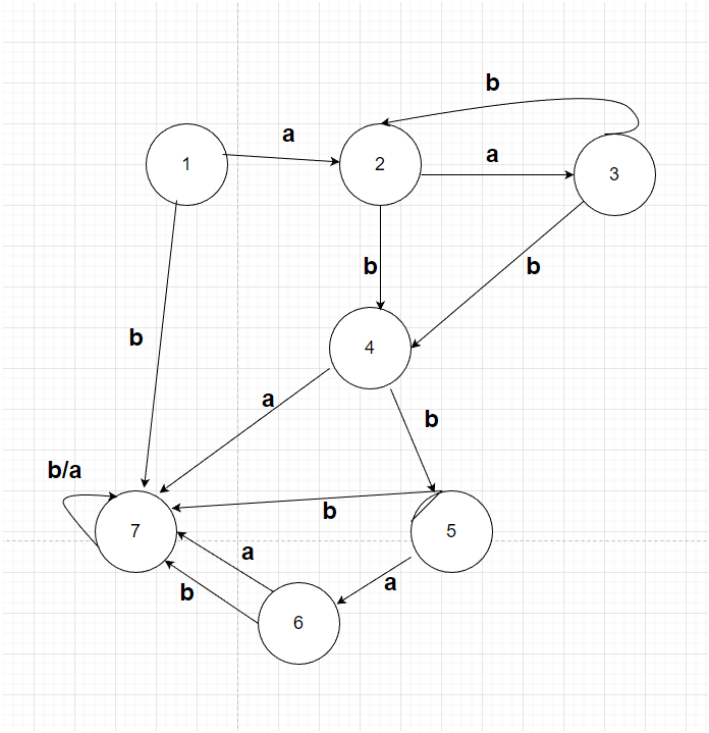
Transitions:

ra = { (1, 1), (1, 2), (2, 4), (5, 6) }

rb = { (2,3), (3, 5) , (4, 3) }

Construct the deterministic automaton: :

G(M, x) , M	a	b	L		Rename the states	a	b
1	1 2	-	0		1	2	7
1 2	1 2 4	3	0		2	3	4
1 2 4	1 2	3	0		3	2	4
3	-	5	0		4	7	5
5	6	-	0		5	6	7
6	-	-	1		6	7	7
-	-	-	0		7	7	7


b
a
a
1
2
3
b
b
b
4
a
b
b/a
b
7
5
a
b
a
6