



TUTORIAL 5

GROUP NAME : T5

GROUP MEMBERS : SYASYA BINTI AZMAN

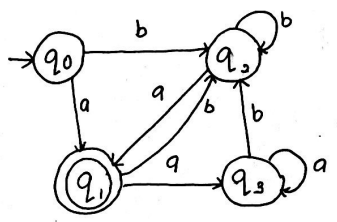
TAY WEI JIAN

NURIN SOFIYA BINTI ROSLE

SECTION : SECI1013 – 09

Question 1

i.



ii. DFA is suitable for verification because DFA has final state and let the machine know it end there. It also has input only.

Question 2

f_s	a	b
s_0	s_2	s_1
s_1	s_3	s_1
s_2	s_4	s_3
s_3	s_2	s_3
s_4	s_2	s_3

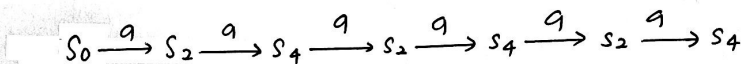
$$S = \{s_0, s_1, s_2, s_3, s_4\}$$

$$I = \{a, b\}$$

$$F = \{s_2, s_3\}$$

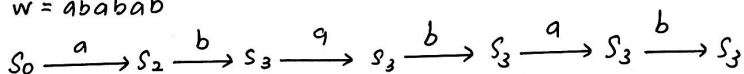
$$\text{Initial} = s_0$$

ii. a) $w = aaaaaa$



(not accepted)

b) $w = ababab$



(accepted)

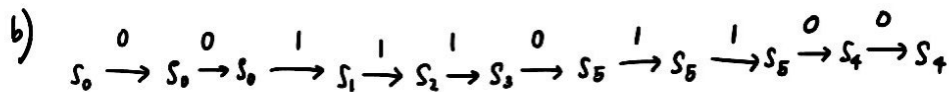
Question 3

i) a) $S = \{S_0, S_1, S_2, S_3, S_4, S_5\}$

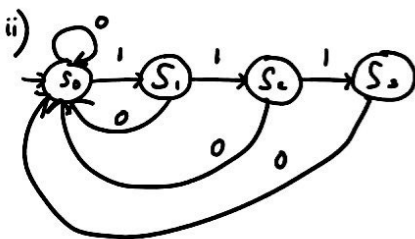
$$I = \{1, 0\}$$

$$q_0 = \{S_0\}$$

$$F = \{S_0, S_1, S_5\}$$



as the string ends at S_4 , non-final state, it is not accepted by DFA



Question 4

S: {W, E, A}

I: {a, b, c}

O: {1, 0}

W: Wander

E: Evade

A: Attack

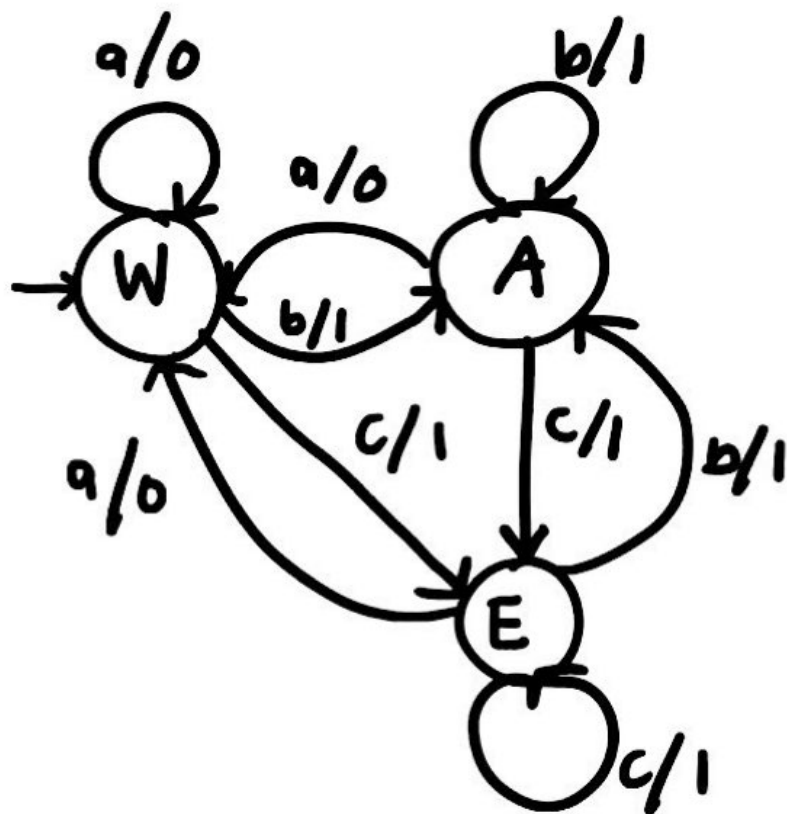
a: not enemy

b: enemy, a: vulnerable

c: enemy, vulnerable

1: shoot

0: not shoot



6)

