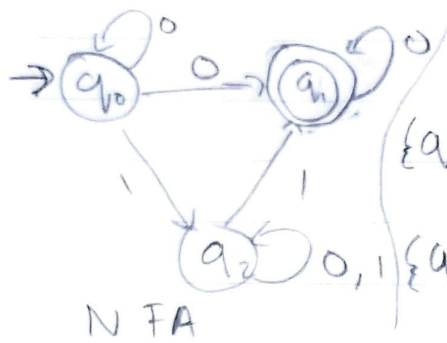
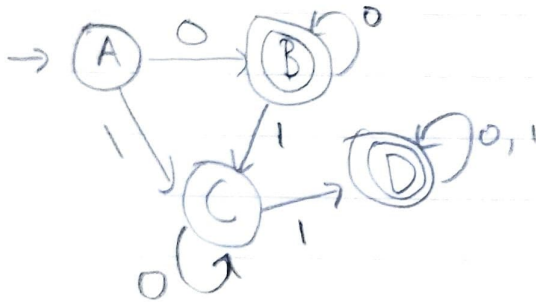


1.



	0	1
$\{q_0\}$	$\{q_0, q_1\}$	$\{q_2\}$
$\{q_0, q_1\}$	$\{q_0, q_1\}$	$\{q_2\}$ ✓
$\{q_2\}$	$\{q_2\}$	$\{q_1, q_2\}$
$\{q_1, q_2\}$	$\{q_1, q_2\}$	$\{q_1, q_2\}$ ✓

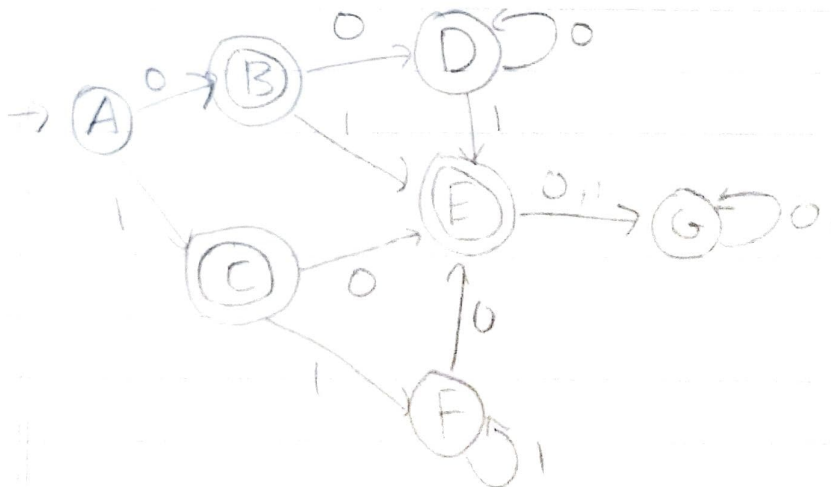


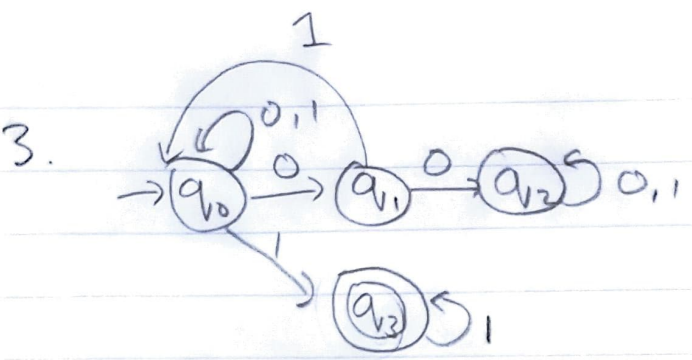
2.

	0	1
q_0	$\{q_1, q_3\}$	$\{q_2, q_3\}$
q_1	q_1	q_3
q_2	q_3	q_2
q_3	\emptyset	\emptyset

DFA:

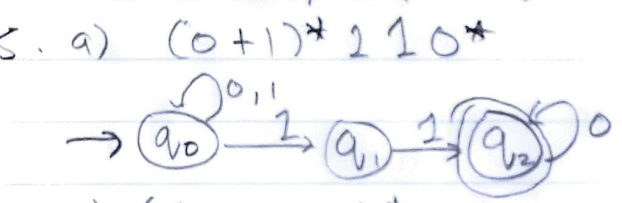
	0	1	
q_0	$\{q_1, q_3\}$	$\{q_2, q_3\}$	A
$\{q_1, q_3\}$	$\{q_1\}$	$\{q_3\}$	B
$\{q_2, q_3\}$	$\{q_3\}$	$\{q_2\}$	C
$\{q_1\}$	$\{q_1\}$	$\{q_3\}$	D
$\{q_3\}$	q_4	q_4	E
$\{q_2\}$	$\{q_1, q_3\}$	$\{q_2, q_3\}$	F
q_4	q_4	q_4	G





4. a) $(0+1)(0+1)0(0+1)^*$
 b) $(0^*(0+1)(0+1)(0+1)^*) + (1(0+1)(0+1)^*)$

c) $(0+1)^*00(0+1)^*010(0+1)^*$
 d) $(11^+) + (011^+)$



b) $(10 + 11)^*0$

