

1)  $RE = X(XY|YX)^+ X^* Y \#$

1 2 3 4 5 6 7 8

a)  $FP(1) = (2, 4)$  ; b)

$FP(2) = (3)$

$FP(3) = (2, 4, 6, 7)$

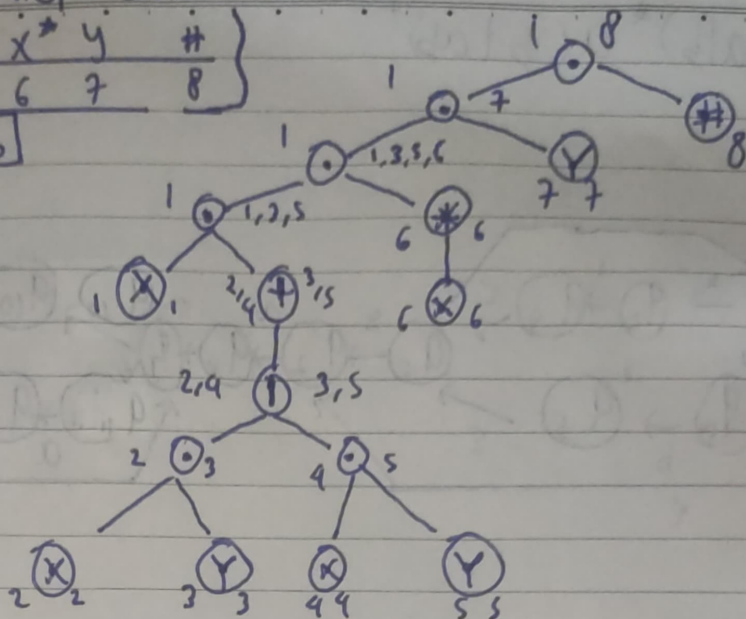
$FP(4) = (5)$

$FP(5) = (2, 4, 6, 7)$

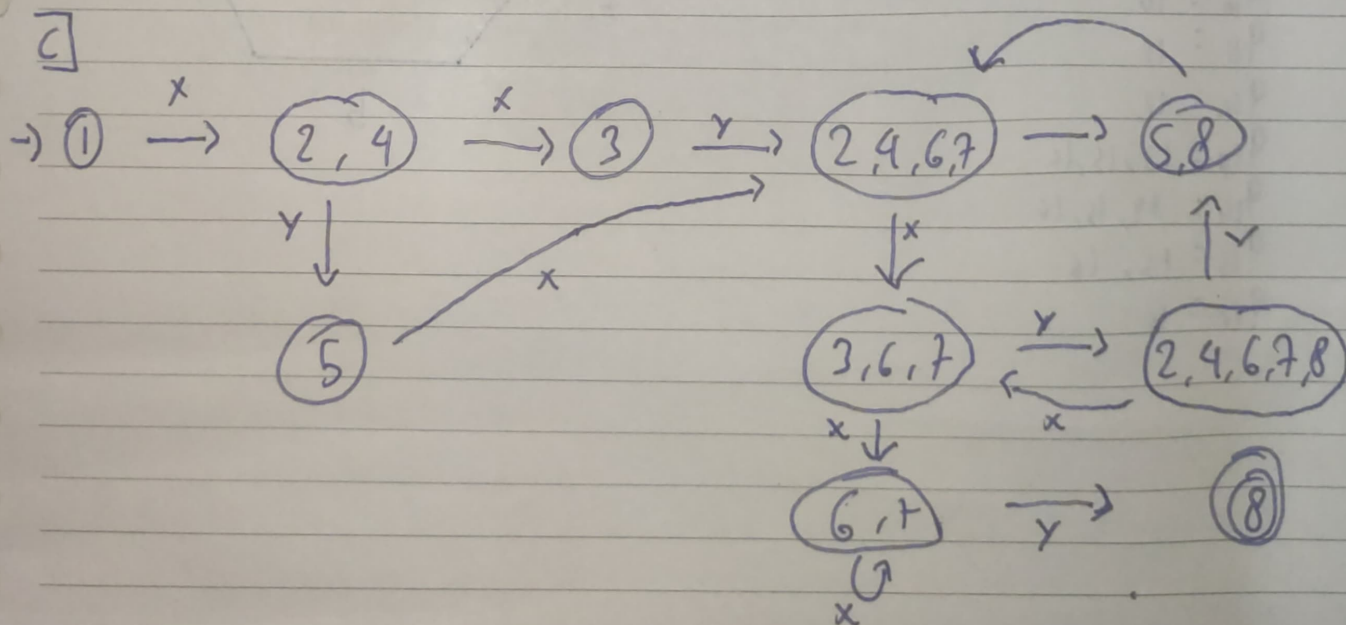
$FP(6) = (6, 7)$

$FP(7) = (8)$

$FP(8) = (-)$

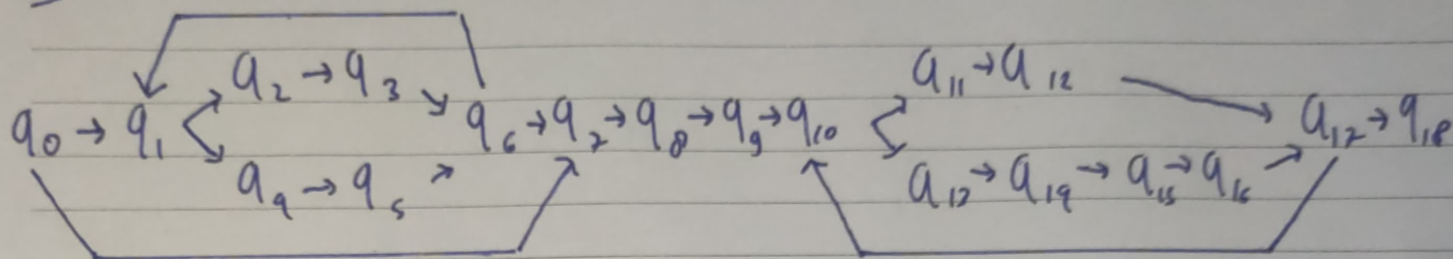


State	X	Y
1	2, 4	-
2, 4	3	5
3	-	2, 4, 6, 7
2, 4, 6, 7	3, 6, 7	5, 8
5	2, 4, 6, 7	-
3, 6, 7	6, 7	2, 4, 6, 7, 8
5, 8	2, 4, 6, 7	-
6, 7	6, 7	8
2, 4, 6, 7, 8	3, 6, 7	5, 8
8	-	-



2) REG.  $(ab)^+ a(blab)^+$

a)



b)

$q_0: 0, 1, 2, 4, 7, 8$

$q_1: 1, 2, 4$

$q_2: 2$

$q_3: 1, 2, 3, 4, 6, 7, 8$

$q_4: 4$

$q_5: 1, 2, 4, 5, 6, 7, 8$

$q_6: 1, 2, 4, 6, 7, 8$

$q_7: 7, 8$

$q_8: 8$

$q_9: 9, 10, 11, 13$

$q_{10}: 10, 11, 13$

$q_{11}: 11$

$q_{12}: 10, 11, 12, 13, 17, 18$

$q_{13}: 13$

$q_{14}: 14, 15$

$q_{15}: 15$

$q_{16}: 10, 11, 13, 16, 17, 18$

$q_{17}: 17, 18$

$q_{18}: 18$

