

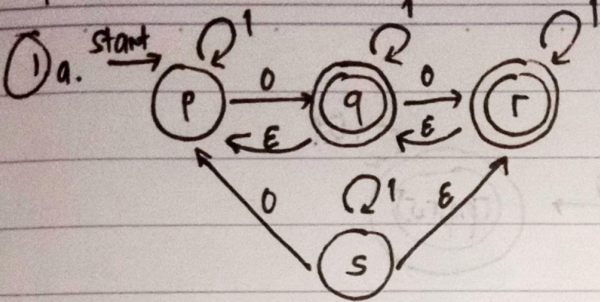
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4 REG A - UTS TEORI BAHASA OTOMATA

No.

Date:



$$ECLOSE(p) = \delta(p, \epsilon) \cup \{p\} = \emptyset \cup \{p\} = \{p\}$$

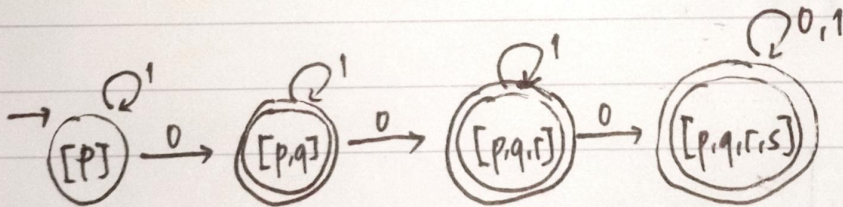
$$ECLOSE(q) = \delta(q, \epsilon) \cup \{q\} = \{p, q\}$$

$$ECLOSE(r) = \delta(r, \epsilon) \cup \{r\} = \{q, r\}$$

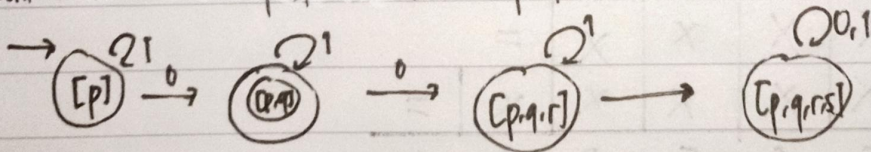
$$ECLOSE(s) = \delta(s, \epsilon) \cup \{s\} = \{r, s\}$$

b.

Q_0	0	1
$\rightarrow [p]$	$[p, q]$	$[p]$
$* [p, q]$	$[p, q, r]$	$[p, q]$
$* [p, q, r]$	$[p, q, r, s]$	$[p, q, r]$
$* [p, q, r, s]$	$[p, q, r, s]$	$[p, q, r, s]$

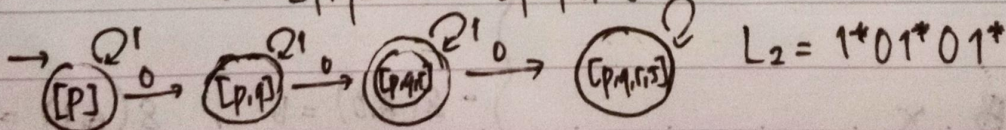


c. - matikan state $[p, q, r]$ dan $[p, q, r, s]$



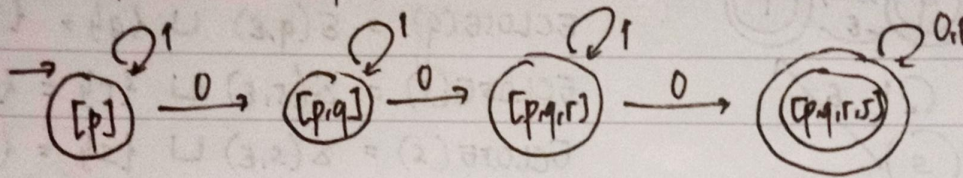
$$L_1 = 1^*01^*$$

- matikan state $[p, q]$ dan $[p, q, r, s]$



$$L_2 = 1^*01^*01^*$$

- maknakan $[p, q]$ dan $[p, q, r]$.



$$L_3 = 1^*01^*01^*0(0+1)^*$$

$$\text{Jadi } L = L_1 + L_2 + L_3$$

$$= 1^*01^* + 1^*01^*01^* + 1^*01^*01^*0(0+1)^*$$

$$= 1^*01^*(\epsilon + 01^* + 01^*0(0+1)^*)$$

$$= 1^*01^*(\epsilon + 01^*(\epsilon + 0(0+1)^*))$$

(2)

A	=								
B	X	=							
C	X	X	=						
D	X	X	X	=					
E	X	X	=	X	=				
F	X	=	X	X	X	=			
G	=	X	X	X	X	X	=		
H	X	X	X	X	X	X	X	=	
	A	B	C	D	E	F	G	H	

$$\delta(A, 0) = B, \delta(A, 1) = A$$

$$\delta(B, 0) = A, \delta(B, 1) = C$$

$$\delta(A, 0) = B \quad X$$

$$\delta(C, 0) = D$$

$$\left. \begin{array}{l} \delta(A, 0) = B \\ \delta(E, 0) = D \end{array} \right\} X$$

$$\left. \begin{array}{l} \delta(A, 0) = B, \delta(A, 1) = A \\ \delta(F, 0) = G, \delta(F, 1) = E \end{array} \right\}$$

$$\begin{aligned} - S(A,0) &= B, S(A,1) = A \\ S(G,0) &= F, S(G,1) = G \end{aligned}$$

$$\begin{aligned} - S(C,0) &= D \\ S(F,0) &= G \quad X \end{aligned}$$

$$\begin{aligned} - S(A,0) &= B, S(A,1) = A \\ S(H,0) &= G, S(H,1) = D \quad X \end{aligned}$$

$$\begin{aligned} - S(C,0) &= D \\ S(G,0) &= F \quad X \end{aligned}$$

$$\begin{aligned} - S(B,0) &= A \quad X \\ S(C,0) &= D \end{aligned}$$

$$\begin{aligned} - S(C,0) &= D \quad X \\ S(H,0) &= G \end{aligned}$$

$$\begin{aligned} - S(B,0) &= A \quad X \\ - S(E,0) &= D \end{aligned}$$

$$\begin{aligned} - S(E,0) &= D \quad X \\ S(F,0) &= G, S(G,0) = F, S(H,0) = G \end{aligned}$$

$$\begin{aligned} = S(B,0) &= A, S(B,1) = C \\ S(F,0) &= G, S(F,1) = E \end{aligned}$$

$$\begin{aligned} - S(F,0) &= G, S(F,1) = E \\ S(G,0) &= F, S(G,1) = G \end{aligned}$$

$$\begin{aligned} - S(B,0) &= A, S(B,1) = C \\ S(G,0) &= F, S(G,1) = G \end{aligned}$$

$$\begin{aligned} - S(F,1) &= E \quad X \\ S(H,1) &= D \end{aligned}$$

$$\begin{aligned} - S(B,1) &= C \quad X \\ S(H,1) &= D \end{aligned}$$

$$\begin{aligned} - S(G,1) &= G \quad X \\ S(H,1) &= B \end{aligned}$$

$$\begin{aligned} - S(G,0) &= D, S(C,1) = B \\ S(E,0) &= D, S(E,1) = F \end{aligned}$$

$$A = G$$

$$B = F$$

$$C = E$$

State yang dihapus E, F, dan G (tidak bisa dijangkau dari ^{start} state)
 state lain yang dihapus adalah H (tidak bisa dijangkau dari start state)

