



Name: Muhammad Laraib Akhtar Section: BCS-5B Rollno: 211-5294 Question 1 For the following language draw a transition diagram for twing machine. That accepts the language ala,R 6/b,R a/A,R b/A,L b/b,R 1/A,R





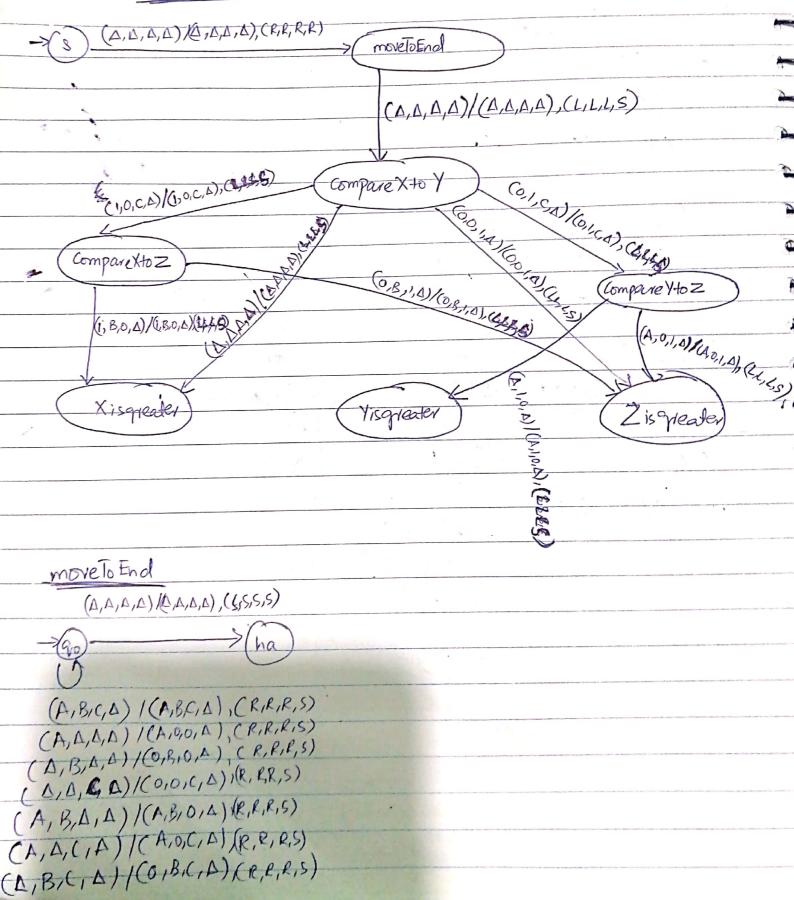
Question 2		
E: $\{a, b\}^* \times \{a, b\}^* - E(x, y) = 0$ othera	$\rightarrow \{0,1\}$ defined sise.	byE(x,y) = 1 if x=y,
Multitape. X on ta	pe 1, You taped, K	Result on tape 3
(#,#,#)(#,#, <u>#)(</u> ₽ŖR) →(\$)	(90) (0,0,0)/(10,0,0)(1,1,1,5)	(α, α, Δ) (α, α, Δ), (P, R, S) (b, b, Δ) (Cb, b, Δ) (P, R, S) ) (γ <sub>1</sub> ) (γ <sub>2</sub> ) (γ <sub>2</sub> ) (γ <sub>3</sub> ) (γ <sub>4</sub> )
	(2) (2,0,0)((1,0,0)(e,e,5) (2) (2,0,0)((e,e,5) (2) (2,0,0)((e,e,5) (2) (2,0,0)((e,e,5) (2) (2,0,0)((e,e,5) (2) (2,0,0)((e,e,5) (2) (2,0,0)((e,e,5) (2) (2,0,0)((e,e,5) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2)	(b, a, \Delta) / (a, b, \Delta) (R, R, S) (b, a, \Delta) / (a, b, \Delta) (R, R, S) (A, B, \Delta) (B, R, S) (B
4		(23)
$A = \{a, b\}$ $B = \{a, b\}$	=	







austion 3







	Comparettor
7	(0,0,1,A) (0,0,1,A), (5,5,5,5) (A,A,A,A) (A,B,A,A), (5,5,5,5) (1,0,C,A) (1,0,C,A), (5,5,5,5) (0,1,C,A), (0,1,C,A), (5,5,6,5)
-	$\frac{(1,0,c,\Delta)(1,0,c,\Delta)}{(1,0,c,\Delta)} \cdot \frac{(5,5,5,5)}{(5,0,c,\Delta)}$
<b>P</b>	(ha)
<b>\$</b>	
1	(A,A,A,A) (CA,A,A,A), (E,E,L,S)
•	
	Compare Xto Z
è	(0,8,1,4)/(0,8,1,4),(S,5,5,5) (1,8,0,1)/(1,13,0,1),(S,5,5,5)
	(1, 8, 0, 12) ( (1, 13, 0, 12) ( \(\delta_1\) \\ \(\ha\) \\ \(\ha\)
-	
	(A,B,A,D) ((A,B,A,A), (L,L,L,S)
	Common Vto Z
	Compare Y+0Z
	(A,0,1,A)/(A,0,1,A), (S,5,5,5) (A,1,0,A)/(A,0,1,A), (S,5,5,5)
	->(90)
	(A, B, B, A)/(A, B, B, A), (L, L, L, S)
	Xisgreater (A,B,C,A)/(A,B,C,A), (K,S,S,R)
The second second	(A & C A N (A B C A) (R S S S S) - (1)
	(90) (91) (40)
	ON MICHAELS MARCHINE
	(A, B, C, A) 1(A, B, C, A), (L, S, S, S)
per l'agrantic de l'agrantic	- 7. C.
to the second second	$(A,B,C,A) \ 1(A,B,C,A), (L,S,S,S)$ $(A,B,C,A) \ 1(A,B,C,A), (L,S,S,S)$ $(A,B,C,A) \ 1(A,B,C,A), (L,S,S,S)$
	(1/4)







Visqueater CABRA) KABRB, (S, R, S, R) (A, A, C, A)/(A, A, C, A), (8, R, S, S) CAN CANCAKESSON HIL (91 (A,B,C,A)/(A,BK,A),(S,L,S,S) CABCIA) /(A,B,C,C), (S,S,K,R) Zisquater (A,B,A,A) (CA,B,A,A) (S,S,R,S (A,B,A,A)/(A,B,A,A), (S,S,S,S) A,B,C,D)(A,B,C,D)/,(S,S,L,S)

