Theory of Awometa Assignment # 03  Name: Atmed kasteer 20F-033b SC  Q1: Prime number is a regular larguage  - There exists a FA nawing m number of states  - Selut w from prime number that is Iw1. Taking prime no-13  w= 110  xyz= 110101 -> 53  xyyyz= 11010101 -> 53  xyyyz= argular larguage  - Then there exist a FA nawing no-of states m.  - Selut w from a 15 abn or [w1, m _ [w1]> a 15 abn  xyz= argular larguage  Q3:- 3-AB  A -> abh/bA/A  B -> 1B/A  A -> aA/bA/A  - 3 -> ABA						
Name About to a regular language  There exists a FA having m number of states  Select w from prime purpter that is IVV. Taking prime no 13  W= 1101  XYZ= 110101 -> 53  XYXYZ= 110101 -> 513 -> this is not a prime number hume  not a regular language  (Pa: -a^b bath is a regular language  Then there exist a FA nawing no of states m.  - Select w from a b about or   w/x m   w/x a b about  XYZ= a mb about  XYZ= a mb about  Then it is not a regular language.  3 -> AB  A -> abbh /bh /\lambda -> 3 -> A/BC  B -> ABA  A -> aa/bab/\lambda  A -> abb/ba/\lambda  - 3 -> ABA  A -> abb/ba/\lambda  - 3 -> ABA  A -> aA/bab/\lambda  - 3 -> ABA						
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- There exists a FA Warry Martin Strategy Prime no.13  - Selet w from prime Durnter that is Jul. Taking prime no.13  w= 1101  xyz= 110101 -> 13  xyyz= 11010101 -> 213 -> this is not a prime number have  not a regular language  not a regular language  - Then there exist a FA having no. of stoles m.  - Selet w from a b about or Julym July a b about xyz= amb about  xyz= amb about  then it is not a regular language.  93:- S->AB  A -> abbh/bA/\lambda -> OA/\lambda  B -> ABCA  A -> aA/bA/\lambda  - S-> ABCA  A -> aA/bA/\lambda  - S-> ABA		Nound: Ahmed Kaster Out-0336_3C				
- There exists a FA Warry Martin Strategy Prime no.13  - Selet w from prime Durnter that is Jul. Taking prime no.13  w= 1101  xyz= 110101 -> 13  xyyz= 11010101 -> 213 -> this is not a prime number have  not a regular language  not a regular language  - Then there exist a FA having no. of stoles m.  - Selet w from a b about or Julym July a b about xyz= amb about  xyz= amb about  then it is not a regular language.  93:- S->AB  A -> abbh/bA/\lambda -> OA/\lambda  B -> ABCA  A -> aA/bA/\lambda  - S-> ABCA  A -> aA/bA/\lambda  - S-> ABA	Q1:-	- Prime number is a regular larguage				
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not a regular language  not a regular language  Then there exist a FA naving no of states m.  - Select w from and and any and a regular language  - Then there exist a FA naving no of states m.  - Select w from and and and any and a regular language.  A -> albh/bA/\lambda -> albh		$\times$ 42 - $101$ -> 13				
nor a regular language  - a b ab th is a regular language  - Then there exist a FA nawing no of states m.  - Belat w from a b ab th or [w]; m [w] > a b ab th  xyz = a b ab ab th  then it is not a regular language.  3:- 3 -> AB  A -> abb /b A / \( \) A -> OA /\( \)  - 3 -> ABCA  - 3 -> ABCA  - 3 -> ABAX /\( \)  - 3 -> ABAX /\( \)  - 3 -> ABA  A -> aA -> ABA/\( \)  - 3 -> ABA  A -> aA -> ABA/\( \)  - 3 -> ABA  A -> aA -> ABA/\( \)  - 3 -> ABA		xlyyz = 110101 -33				
(9a:a"b"ab" is a regular language  - Then there exist a FA nawing no of states m.  - Select w from a"b"ab" or [w]>m [w]>a"b"ab" or [w]>m [w]>a"b"ab" or [w]>a"b"ab" or [w]>m [w]>m [w]>a"b"ab" or [w]>m [w]>a"b"ab" or [w]>m [w]>a"b"ab" or [w]>m [w]>	Pe	2/4/4/2= 1/0/0/01 -3 2/3 -3 /12 2 - 1/				
- Nen there eas a home $a^nb^nab^{n+1}$ or $ w  > a^nb^nab^{n+1}$ - Select $w$ from $a^nb^nab^{n+1}$ or $ w  > m$ . $ w  > a^nb^nab^{n+1}$ - $xyz = a^mb^mab^{m+1}$ - $xyyz = a^mb^mab^{m+1}$ - $xyz = a^mb^mab^{m+1}$ -		not a regular language				
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- Nen there eas a home $a^nb^nab^{n+1}$ or $ w  > a^nb^nab^{n+1}$ - Select $w$ from $a^nb^nab^{n+1}$ or $ w  > m$ . $ w  > a^nb^nab^{n+1}$ - $xyz = a^mb^mab^{m+1}$ - $xyyz = a^mb^mab^{m+1}$ - $xyz = a^mb^mab^{m+1}$ -	<u> 42:-</u>	- a babas is a regular rood states m.				
$xyz = a^{m}b^{m}ab^{m+1}$ $xyyz = a^{m}b^{m}b^{m}ab^{m+1}$ $+ ten it & not a regular language.$ $A -> abbA/bA/\lambda - S -> ABC$ $B -> abB/\lambda - B -> 1B/\lambda$ $- S -> ABCA -> aaA/bbA/\lambda -> ADARC/\lambda -> abD/baD/\lambda -> abD/baD/\lambda -> ABA/bA/\lambda -> ABA/bA/\lambda -> ABA/bA/\lambda -> ABA/bA/\lambda -> ABA/bA/\lambda -> ABA/bA/A -> ABA$		- Then there exist a ry or luly m /w/> anb"ab"+1				
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then it is not a regular sarguage. $93: S \rightarrow AB$ $A \rightarrow abbA/bA/\lambda$ $B \rightarrow abbA/\lambda$ $C \rightarrow abbA/bA/\lambda$ $C \rightarrow abb/bA/\lambda$		$xyz = \alpha mb'''\alpha b'''$				
93:- $S \rightarrow AB$ $A \rightarrow \alpha bbA/bA/\lambda$ $B \rightarrow \alpha bB/\lambda$ $A \rightarrow \alpha bA/\lambda$ $A \rightarrow \alpha bA/\lambda$ $A \rightarrow \alpha A/BC$ $A \rightarrow \alpha A/\lambda$	nit.	Hyyz= ambibility language.				
$A \rightarrow \alpha bbA/bA/\lambda$ $B \rightarrow \alpha bB/\lambda$ $A \rightarrow \alpha A/\lambda$ $B \rightarrow 1B/\lambda$ $A \rightarrow \alpha A/bA/\lambda$ $C \rightarrow ADADC/\lambda$ $D \rightarrow \alpha bD/baD/\lambda$ $A \rightarrow \alpha A/bA/\lambda$		V Section 1997				
$B \longrightarrow \alpha bB / \Lambda$ $- S \longrightarrow ABCA$ $- A \longrightarrow \alpha aA / bbA / \Lambda$ $- A \longrightarrow \alpha bD / baD / \Lambda$ $- A \longrightarrow Abb D A$ $- A \longrightarrow ABA$ $- A \longrightarrow ABA$ $- A \longrightarrow ABA$ $- A \longrightarrow ABA$	93:-	S->AB -> AJBC				
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and the second	S-> AS 155/b/a/BB	* unir Proelution
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	A no useless symbol.	
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	A-> HaB/aB/aA/a	
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