

Name: Babasanmi

oluwafikayomi Ruth

Matrix no: 17/sci01/018

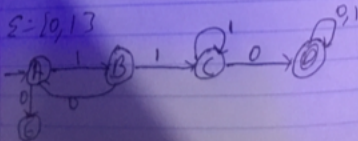
Name: Babasanmi oluwafikayomi

① ~~What is~~
Finite automaton is a simple idealized machine used to recognize patterns within input taken from some character set or alphabet. The job of FA is to accept or reject an input depending on whether the pattern defined by the FA occurs in the input.

Finite automata can be represented by input tape and finite control. Input tape: It is a linear tape having some number of cells. Finite control: The finite control decides the next state on receiving particular input from input tape.

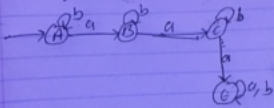
2) $L(a,b) = \{b, bba, bbaa, bbaab, bbabb\}$

4) $\Sigma = \{0,1\}$

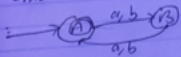


5. $\Sigma = \{a, b\}$

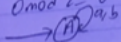
$L = \{aa, aab, aba, abb, a, baa, b, baba\}$



ii) $\Sigma = \{a, b\}$
 $2 \pmod 3 = 2$



iii) $\Sigma = \{a, b\}$
 $0 \pmod 2 = 0$



iv) $\Sigma = \{a, b\}$
 $L = \{a, aa, aaaa, b, bbb, bbb, bba, abb\}$ w most 3

