



UNIT 3. Finite Automata

A Finite Automaton is a machine that takes a sequence of symbols as input, and it answers with yes or no according to whether the input sequence is accepted or rejected. The memory of the automaton is represented by its states. This kind of Automata is used to recognize Type-3 languages, which are also known as Regular Languages. Unit 3 formally defines the concept of Finite Automaton, introduces a classification for these Automata, and presents the main operations and basic concepts related to them.

The main objectives of Unit 3 are:

- To introduce the concept of Finite Automaton.
- To know the relationship between Finite Automata and Sequential Machines.
- To classify Finite Automata into Deterministic and Non-Deterministic.
- To learn the representation and basic concepts related to these Automata.
- To know how to calculate a DFA equivalent to a NFA.

