



UNIT 2. Automata Theory

The concept of language may refer either to the human capacity for acquiring and using complex systems of communication, or to a specific instance of such a system of complex communication. A language is formal if it is provided with a mathematically rigorous representation of its alphabet and formation rules. In Computer Science, formal languages are used for the precise definition of programming languages. Unit 2 presents important concepts and operations related to Formal Languages.

The main objectives of Unit 2 are:

- To introduce the concept of automaton and the corresponding mathematical model.
- To define the relationship between Automata and algorithms.
- To study the different classes of automata.
- To know what is a Formal Language.
- To learn the main operations with words and with languages.

