



UNIT 5. Regular Languages

This unit is focused on the description of Type-3 Languages, which are also known as Regular or Linear Languages. The unit extends the contents that have presented in Unit 3 in order to describe the use of Finite Automata to recognize this kind of languages. Regular expressions provide an additional representation for these languages. A regular expression can be defined as an algebraic language for specifying regular languages. In this unit we study the main relationships among Type-3 Languages, Finite Automata and Regular Expressions.

The main objectives of Unit 5 are:

- To learn the relationship between Finite Automata and Type-3 Grammars.
- To know how to calculate a Finite Automata associated to a Type-3 grammar.
- To know how to calculate a Type-3 Grammar associated to a FA .
- To learn what is a regular expression.
- To introduce the relationship between Regular expressions and Regular Languages.

