

UNIT 5. Top-Down Parsing

There are two major parsing approaches: Top-Down and Bottom-Up. Top-down parsing techniques initiate the analysis with the axiom of the grammar and apply the production rules until arriving at the desired string.

The main objectives of Unit 5 are:

- Describe the main characteristics of Top-Down parsing techniques.
- Study the backtracking approach for parsing an input string.
- Learn the most relevant techniques to develop a Top-Down predictive parser.
- Know the main features and restrictions of LL(1) grammars.
- Learn how to calculate the first and follow sets.
- Describe the Table-driven LL(1) Parsing technique.
- Present the main alternatives for error detection and recovery using the described parsing techniques.