uc3m Universidad Carlos III de Madrid

UNIT 6. Bottom-Up Parsing

There are two major parsing approaches: Top-Down and Bottom-Up. Bottom-up parsing techniques initiate the analysis with the string and reduce it to the axiom of the grammar by applying the production rules backwards.

The main objectives of Unit 6 are:

- Describe the main characteristics of Bottom-Up parsing techniques.
- Study the most relevant features and approaches in shift-reduce parsing.
- Learn how to construct LR table-driven shift-reduce parsers ("L" for left to right scan of input, "R" for rightmost derivation),
- Know the main pros and cons of LR(0), LR(1), SLR(1) and LALR(1) techniques.