uc3m Universidad Carlos III de Madrid

UNIT 3. Formal Grammars

Grammars are powerful structures to describe and analyze languages. In Unit 3 we review the most important concepts related to formal grammars (main definitions, use of the production rules, derivations and parse trees representations, Chomsky Hierarchy, BNF notation, etc.).

The main objectives of Unit 3 are:

- Review the previously described concepts related to Formal Grammars.
- Describe the relationships between context-free grammars and programming languages.
- Illustrate the key issues in parsing context-free grammars (ambiguity, recursive rules, and left-factoring).
- Review the design of Push-Down Automata to recognize context-free languages.

