# Design Patterns

Interpreter Pattern

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## 1 Description

One class for each symbol:

- Terminal
- Nonterminal
- 1.1 Terminal Symbols
- 1.2 Nonterminal Symbols
- 1.3 Abstract Syntax Tree

## 2 Purpose

#### 2.1 When should it be used?

Should be used when:

- there's a language to interpret.
  - Represent statements as AST
- the grammar is simple.
  - Use parsers for a large class hierarchy.
  - Doesn't use an AST. Saves space and time.
- efficiency is not a critical concern.
  - More efficient when translating the parse tree to another form.

- 3 UML
- 4 Example