

## UNIT 7. Semantic Analysis

For a program to be semantically valid, all variables, functions, classes, etc. must be properly defined, expressions and variables must be used in ways that respect the type system, access control must be respected, and so forth. Semantic analysis is the front end's penultimate phase and, thus, the compiler's last chance to weed out incorrect programs.

The main objectives of Unit 7 are:

- Describe the role of the semantic analyzer into the architecture of a language processor.
- Study the main tasks that must be completed by a semantic analyzer and the main approaches to solve them.
- Learn how to develop a type checker.
- Study how to complete the scope checking task.