

## Compiler Tool

The purpose of the project was to develop a compiler using the following four phases:

- (1) Writing a Scanner
- (2) Developing a Parser
- (3) Verifying the Semantics
- (4) Producing Intermediate code
- (5) Generating Assembly code

The first stage includes the verification of the valid tokens and assigning a code for each of the tokens. In the second phase the tokens are parsed using simple precedence grammar essentially through the simple precedence relation. The parsed output is then verified for its semantics. Once the semantics are verified each statement in the language is converted to an intermediate code called four-tuples. The final step is to produce assembly code for the four tuples.

Language used: Perl

Parsing Technique: Simple precedence relation

Code Generation in SPARC assembly code

