

Assignment-3

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FOC Assignment

Lexical Analyser:

- Reach the successive line.
- Breaks into tokens like identifier, operator, delimiter
- Construct symbols table.
- Symbol table allocate memory

Lexical Analysis is the first phase of the compiler also known as a scanner. It converts the high level input program into a sequence of tokens.

* Lexical Analysis can be implemented with the Deterministic finite Automata.

- The output is sequence of tokens that is sent to the parser for syntax analysis.

Syntax Analyser

- Expression, statement, declaration identified
- Aided by formal grammars of programming language

Syntactic analysis or parsing or syntax analysis is the third phase of NLP. The purpose of this phase is to draw exact meaning from the text. Syntax analysis checks the text for meaningfulness.

5) IF have a computer architecture

6) IF consumes more power

comparing to the rules of formal grammar.

For Example the Sentence "Not ice cream" would be rejected by Semantic Analyzer.

Semantic Analysis

→ Analysis phases of Syntax.

→ Last phase of translation is code generation.

Tools:

Lex - Lexical Analyser

Yacc - Yet Another compiler

Semantic Analysis make sure that declaration and statements of program are semantically correct it is a collection of procedures which is called by parser and when required by grammars.

Both Syntax tree of previous phase and Symbol table are used to check the consistency of the given code. Type checking an important part of semantic analysis where compiler makes sure that operator has matching operands.