Compiler design lab assignment.

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CSE-I

# REPORT:

**Symbol Table** is an important data structure created and maintained by the compiler. It is used by various phases of the compiler.

1. Lexical analysis
2. Syntax analysis
3. Semantic analysis
4. Intermediate code generation
5. Code optimization
6. Target code generation

Implementation of symbol table is done by 3 ways:

1. Linked list
2. Hash table
3. Binary search tree

Symbol table is used by both the analysis and the synthesis parts of a compiler.

It maintains an entry for each name.

Variable names and constants

Procedure and function names

Literal constants and strings

Compiler generated temporaries

Labels in source languages

