

Symbol Table

Experiment 04: Implementing Symbol Table in C

Tasks:

Task 01: Write a Program to find whether given string is a keyword or not.

Task 02: Implement the method **search()** in the “symbol table program” that will search for a particular symbol and show all the information related to the symbol.

Task 03: Modify the program such a way that it will also take function arguments as symbols and tag it as local.

Assignment:

1. Selecting a suitable data structure for symbol table (the alternates are linked list, hashing, array of structures, binary search tree)
2. Having selected a data structure, identifying the appropriate fields.
3. Use the Task 02 to avoid duplicate of symbols.

Note: Use structure type to implement the symbol table dynamically.

The different data Structures that can be used are:

- a) Linked list.
- b) Array of Structures

The appropriate fields are Name, Type, Value, etc.