

# Government Engineering College Thrissur

System Software Lab

Navaneeth D

TCR18CS043

S5, CSE

# Symbol Table - Hashing

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## AIM

Implement a symbol table with suitable hashing

## THEORY

A symbol table may serve the following purposes depending upon the language in hand:

- To store the names of all entities in a structured form at one place.
- To verify if a variable has been declared.
- To implement type checking, by verifying assignments and expressions in the source code are semantically correct.
- To determine the scope of a name (scope resolution).

A symbol table is simply a table which can be either linear or a hash table. It maintains an entry for each name in the following format:

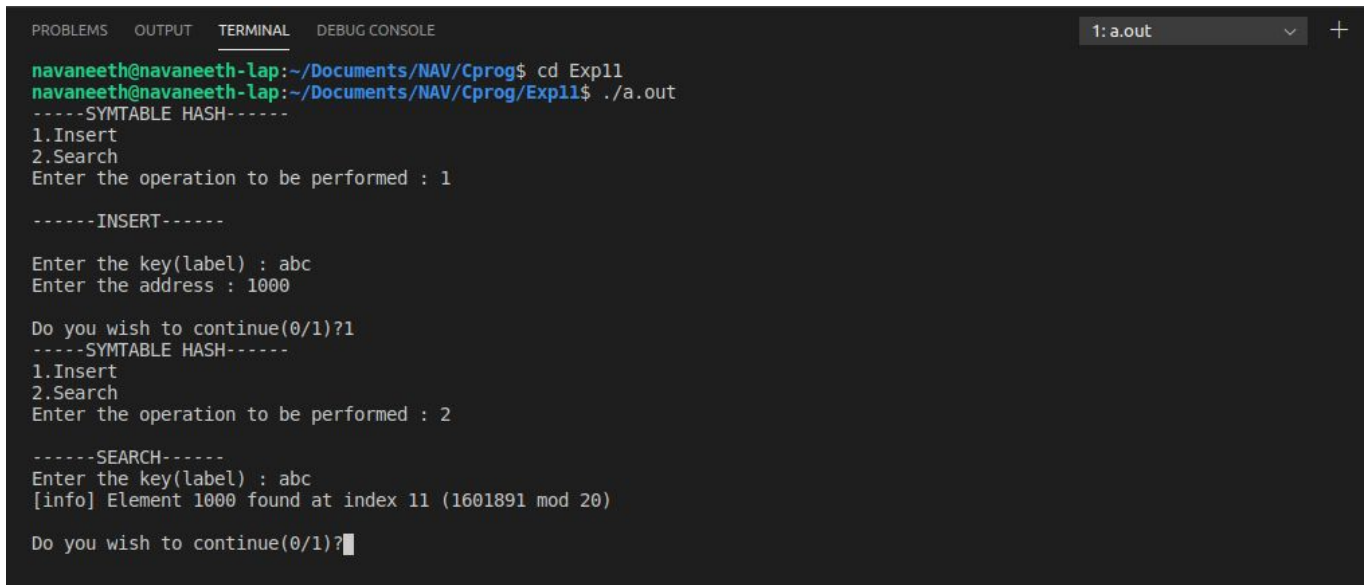
```
<symbol name, type, attribute>
```

## RESULT

A symbol table with suitable hashing was implemented with successful output.

# Output Screenshots

Terminal Output:



```
PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE 1: a.out +
navaneeth@navaneeth-lap:~/Documents/NAV/Cprog$ cd Exp11
navaneeth@navaneeth-lap:~/Documents/NAV/Cprog/Exp11$ ./a.out
-----SYMTABLE HASH-----
1.Insert
2.Search
Enter the operation to be performed : 1

-----INSERT-----

Enter the key(label) : abc
Enter the address : 1000

Do you wish to continue(0/1)?1
-----SYMTABLE HASH-----
1.Insert
2.Search
Enter the operation to be performed : 2

-----SEARCH-----
Enter the key(label) : abc
[info] Element 1000 found at index 11 (1601891 mod 20)

Do you wish to continue(0/1)?
```