

Analysis of different implementation of symbol table in C.

### 1) Using linked list:-

Structure of symbol table is created with integer, string and points to next element as members. The string is value of identifiers. a pointer link to link to next element.

The insert function is created to add identifiers to structure and display is used to show all stored identifiers. The symbol table stores the id and information about the identifiers. The advantages of using linked list we can add and delete identifiers and additional info.

### Symbol Table using Hash Table:-

Structure of symbol table is declared with integer and character pointer members. The integer and character acts as info & id key value pair. The is also insert and display functional, the code automatically takes in identifiers & insert

them to hash table with sequentially generated keys.

To stop the while loop enter and stored info and identifiers are displayed.

### Symbol Table using linear list

Declare a two dimensional array of characters each row in this data structure store one identifier function symbol table that does inserting and searching operations into linear list. The search operation goes through each element in list and compares it to occurred Id's check if identifier is already present then insert function is used if identifier is not present.