

## Analysis of different implementation of Symbol table in 'C'

### ① Using linked List:-

Structure of Symbol table is created with category string and pointer to next element is number. The string is value of identifier is pointer link to next element.

The Insert function is created to add identifier to structure and display is used to show all stored identifier. The Symbol table store the id and info about identifier.

The advantage of using linked list we can add delete identifier and additional info

② Symbol table using hash table  
Structure of symbol table is defined with  
integer and character pointer member. The  
Integer and character act as link and id key  
value pair. There is also insert and display  
function, the code automatically takes in  
Identifier and insert them to hash table with  
Subsequently generated keys. To stop the while  
loop enter 0 and the stored info and  
Identifier are displayed

③ Symbol table using linear list  
Declare a two dimensional array of character  
Each row is data structure. Start one identifier  
function symbol table that does inserting

and searching operations into linear test

The search operation goes through each element in list and compare it to needed  
it to check if identifier is already present,  
Then the insert function is used if identifier  
is not used.

(Program of linked list and hashtable  
implementing are attached in ZIP file with Output)