

Analysis of different implementation of symbol in C

1) Using linked list:

Structure of symbol table is created with integer, string and point to next element in members. The string is value of identifier a pointer link to link of next element.

The insert function is created to add identifier to structure and display is used to show all stored identifier. The symbol table stores the id and information about the identifier. The advantages of using linked list we can add and delete identifier 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 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 sequentially generated keys - To stop the while loop enters and stored info and identifier are displayed

Symbol table using linked list

Declare a two dimensional array of characters each row in this data structures store one identifier function symbol table that does inserting and searching operations into linked list.

The search operation goes through each element in list and checks if it occurred id & check if the identifier is already present then insert function is used if identifier is not present.