

Analysis of our implementation of Symbol table C

1) By using linked list

Function used in the linked list are insert(), display() and search(). The struct of linked list consist of key, data, type, scope, data struct and ~~pair struct of the~~.

The data is saved in linear linked list that traverse from head to null.

As it has to check all the data-node pair in order to search this leads to more time complexity.

Whereas it doesn't require any predefined size as control dynamically and can delete node easily.

2) By Hash Table

The structure of the table is similar to the linear list except data is saved in a Hash Array.

Due to hashing the time complexity of deletion and Insertion and searching is very less than linear linked list.