

```
void insert (int key)
```

```
    index = int (key % max)
```

```
    ptr [index] = (node-type*) malloc (sizeof (node-type))
```

```
    ptr [index] -> data = key
```

```
    if (root [index] == NULL)
```

```
        root [index] = ptr [index]
```

```
        root [index] -> next = NULL
```

```
        temp [index] = ptr [index]
```

```
    else
```

```
        temp [index] = root [index]
```

```
        while (temp [index] -> next != NULL)
```

```
            temp [index] = temp [index] -> next
```

```
        temp [index] -> next = ptr [index]
```

```
void search (int key)
```

```
    int flag = 0
```

```
    index = int (key % max)
```

```
    temp [index] = root [index]
```

```
    while (temp [index] != NULL)
```

```
        if (temp [index] -> data == key)
```

```
            cout << "Search found"
```

```
            flag = 1
```

```
            break
```

```
        else temp [index] = temp [index] -> next
```

```
    if flag == 0
```

```
        cout << "Search not found"
```

```
void delete (int key)
```

```
    index = int (key % max)
```

```
    temp [index] = root [index]
```

```
    while (temp [index] -> data != key && temp [index] != NULL)
```

```
ptr[index] = temp[index]
temp[index] = temp[index] -> next
ptr[index] -> next = temp[index] -> next
cout << temp[index] -> data << " has been deleted"
temp[index] -> data = -1
temp[index] = NULL
free(temp[index])
```