

8. Implement function of Dictionary using Hashing

```

void Dictionary::search(int key)
{
    int flag=0;
    index= int(key % max);
    temp[index].root(index);
    while(temp[index] != NULL)
    {
        if (temp[index] → data == key)
        {
            cout << "In Search Success";
            flag=1;
            break;
        }
        else
            temp[index] = temp[index] → next;
    }
    if (flag == 0)
        cout << "In Search Unsuccessful";
}

Dictionary::Dictionary() {
    index = -1;
    for (int i=0; i < max; i++) {
        root[i] = NULL;
        ptr[i] = NULL;
        temp[i] = NULL;
    }
}

```

void Dictionary::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 Dictionary::delete_ele (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 << "\n" << temp [index] → data << " has deleted";
    temp [index] → data = -1;
    temp [index] = NULL;
    free (temp [index]);
}
```