

Implement Hashing using chaining

```
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::search (int key)
{
    int flag = 0;
    index = int (key % max);
    temp[index] = root [index];
    while (temp [index] != NULL)
    {
        if (temp[index].data == key)
        {
            system.out.println ("In search  
key is found");
            flag = 1;
            break;
        }
        else temp[index] = temp[index].next;
    }
    if (flag == 0) {
        system.out.println ("search key  
not found");
    }
}
```