

ADS - Lab -> Dictionary

```
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 (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 << "deleted";
temp[index] → data = -1;
temp[index] = NULL;
free(temp[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)
        {

```

```

            cout << "\n key found" << endl;

```

```

            flag = 1;

```

```

            break;

```

```

        }

```

```

    else

```

```

        temp[index] = temp[index] → next;

```

```

    }

```

```

    if(flag == 0)

```

```

        cout << "\n Search key not found";

```

```

}

```