

LAB 9 - Program 8 - Implement functions of dictionary using Hashing.

```
class HashTableEntry {
public:
    int k;
    int v;
    HashTableEntry (int k, int v) {
        this->k = k;
        this->v = v;
    }
};
```

```
class HashMapTable {
private:
    HashTableEntry **t;
public:
    HashMapTable() {
        t = new HashTableEntry * [Table-size];
        for (int i=0, i < Table-size; i++)
            t[i] = NULL;
    }
    int HashFunc (int k) {
        return k % Table-size;
    }
    void Insert (int k, int v) {
        int h = HashFunc(k);
        while (t[h] != NULL && t[h]->k != k)
        {
            h = HashFunc(h+1); // Linear probing
        }
    }
};
```

```

if (t[h] != null)
    delete t[h];
t[h] = new HashTableEntry (k, v);
}
int search (int k)
{
    int h = hashFunc(k);
    while (t[h] != null && t[h] -> k != k) {
        h = hashFunc(h+1);
    }
    if (t[h] == null)
        return -1;
    else
        return t[h] -> v;
}
void deleteEle (int k)
{
    int h = hashFunc(k);
    while (t[h] != null) {
        if (t[h] -> k == k)
            break;
        h = hashFunc(h+1);
    }
    if (t[h] == null) {
        cout << " No element found at key " << k << endl;
        return;
    }
    else {
        delete t[h];
        cout << "element deleted " << endl;
    }
}
}
}

```