

```
class Entry-Hashtable
```

```
{
```

```
    public:
```

```
        int k, v;
```

```
        Entry-Hashtable (int k, int v)
```

```
        {
```

```
            this → k = k
```

```
            this → v = v;
```

```
        }
```

```
    };
```

```
class Map-Hashtable
```

```
{
```

```
    private: int Entry-Hashtable **t;
```

```
    public:
```

```
        • Map-Hashtable() {
```

```
            t = new Entry-Hashtable * [size];
```

```
            for (i = 0; i < size; i++)
```

```
                t[i] = NULL;
```

```
        }
```

```
        int Hashfunc (int k)
```

```
        {
```

```
            return k % 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 Entry-Hashtable(k, v);
```

```
}
```

```
int delete (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" .
```

```
return;
```

```
}
```

```
else {
```

```
delete (t[h]);
```

```
cout << "Element deleted";
```

```
}
```

```
}
```

```
};
```