

```

package finalhashmap;

import java.util.ArrayList;

public class Map<K,V> {

    ArrayList <Map<K,V>> buckets;
    int count;
    int numBuckets;

    public Map() {
        buckets = new ArrayList<>();
        numBuckets = 20;
        for(int i=0;i<numBuckets;i++) {
            buckets.add(null);
        }
    }
    private int getBucketIndex(K,Key) {
        int hc = Key.hashCode();
        int index = hc%numBuckets;
        return index;
    }
    public void insert (K value,V Value) {

        int bucketIndex = getBucketIndex(Key);
        MapNode<K,V> head = buckets.get(bucketIndex);
        //element is not there ? just update its value

        while(head != null) {
            if(head.key.equals(key)) {
                head.value = value;
                return;
            }
            head = head.next;
        }

        // element is not there.insert at 0th position of linked list
        head = buckets.get(bucketIndex);
        MapNode<K,V> head = new MapNode<>(Key,Value);
        head.next = head;
        buckets.set(bucketIndex , head);
        count++;
    }
}

```