

```
/**  
 * Q 1) Write an implementation of hash tables from scratch. Define the  
 * following methods: get(key), put( key, value ), remove(key), containsKey  
 * (key), and size().  
 */
```

```
import java.util.Hashtable;  
public class hashtable  
{  
  
    public static void main(String[] args) {  
  
        Hashtable hashTable=new Hashtable<>();  
  
        //put(key,value)  
        hashTable.put(1,"Kaustubh");  
        hashTable.put(2,"Mahesh");  
        hashTable.put(3,"Angad");  
        hashTable.put(4,"Sagar");  
  
        //printing complete hashTable  
        System.out.println(hashTable);  
  
        //get(key) method  
  
        System.out.println(hashTable.get(1));  
  
        //remove(key)  
  
        hashTable.remove(3);  
        System.out.println(hashTable);  
  
        //contains(key)  
  
        System.out.println(hashTable.containsKey(3)); //false  
        System.out.println(hashTable.containsKey(1)); //True  
  
        //size  
  
        System.out.println(hashTable.size());  
    }  
}
```

P.T.O.

Output:

```
kaustubh@kaustubh-Desktop:redhat.java/jdt_ws/assignment  
no6_12d2feld/bin" hashtable
```

```
{1=Kaustubh, 2=Mahesh, 3=Angad, 4=Sagar}
```

```
Kaustubh
```

```
{1=Kaustubh, 2=Mahesh, 4=Sagar}
```

```
false
```

```
true
```

```
3
```