```java
/**
* 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.HashMap;

public class hashtable
{

public static void main(String[] args) {

HashMap hashMap=new HashMap<>();

//put(key,value)
hashMap.put(1,"Kaustubh");
hashMap.put(2,"Mahesh");
hashMap.put(3,"Angad");
hashMap.put(4,"Sagar");

//printing complete HashMap
System.out.println(hashMap);

//get(key) method

System.out.println(hashMap.get(1));

//remove(key)

hashMap.remove(3);
System.out.println(hashMap);

//contains(key)

System.out.println(hashMap.containsKey(3)); //false
System.out.println(hashMap.containsKey(1));//True

//size

System.out.println(hashMap.size());
}
}
```

P.T.O.

Output:

```
kaustubh@kaustubh-Desktop:redhat.java/jdt_ws/assignment
no6_12d2fe1d/bin" hashtable


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