Task-3

1.Write a Java program to associate the specified value with the specified key in a HashMap.

Solution:

```java
import java.util.*;

public class Example1 {
    public static void main(String[] args)
    {
        HashMap<Integer, String> hash_map = new HashMap<Integer, String>();
        hash_map.put(1, "Red");
        hash_map.put(2, "Green");
        hash_map.put(3, "Black");
        hash_map.put(4, "White");
        hash_map.put(5, "Blue");
        for (Map.Entry<Integer, String> entry : hash_map.entrySet()) {
            System.out.println(entry.getKey() + " " + entry.getValue());
        }
    }
}
```

Output:

1 Red

2 Green

3 Black

4 White

5 Blue

2.Write a Java program to check whether a HashMap contains key-value mappings (empty) or not.

Solution:

```
import java.util.*;

public class Example5 {

  public static void main(String args[]) {

  HashMap <Integer,String> hash_map = new HashMap <Integer,String> ();

  hash_map.put(1, "Red");

  hash_map.put(2, "Green");

  hash_map.put(3, "Black");

  hash_map.put(4, "White");

  hash_map.put(5, "Blue");

  boolean result = hash_map.isEmpty();

  System.out.println("Is hash map empty: " + result);

  hash_map.clear();

  result = hash_map.isEmpty();

  System.out.println("Is hash map empty: " + result);

 }
}
```

Output:

Is hash map empty: false

Is hash map empty: true

3. write a program in Java to create a Map Interface where we can store the cricketer name in it along with his scores and search for the batsman name and display his score.

Solution:

```
import java.util.*;
public class GFG {
        public static void main(String[] args)
        {
                Map<String, Integer> map = new HashMap<>();
                map.put("vishal", 10);
                map.put("sachin", 30);
                map.put("vaibhav", 20);
                for (Map.Entry<String, Integer> e : map.entrySet())
                        System.out.println(e.getKey() + " "
                                                + e.getValue());
        }
}
```

Output:

vaibhav 20

vishal 10

sachin 30