TASK - 3

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

```java
import java.util.HashMap;

public class HashMapExample {
    public static void main(String[] args) {
        HashMap<String, Integer> myMap = new HashMap<>();

        myMap.put("Apple", 5);
        myMap.put("Banana", 3);
        myMap.put("Orange", 7);
        {
            System.out.println(myMap);
        }
    }
}
```
   OUTPUT:
   {Apple=5, Orange=7, Banana=3}

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

```java
import java.util.HashMap;

public class HashMapIsEmpty {
    public static void main(String[] args) {
        HashMap<String, Integer> myMap = new HashMap<>();
        System.out.println("Map is empty: " + myMap.isEmpty());

        myMap.put("Apple", 5);
        myMap.put("Banana", 3);
        System.out.println("Map is empty: " + myMap.isEmpty());
```

```java
            myMap.clear();
            System.out.println("Map is empty: " + myMap.isEmpty());
        }
    }
```

OUTPUT:
Map is empty: true
Map is empty: false
Map is 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:

```java
import java.util.HashMap;
import java.util.Scanner;

public class CricketerScores {

    public static void main(String[] args) {
        HashMap<String, Integer> scores = new HashMap<>();
        Scanner scanner = new Scanner(System.in);

        while (true) {
            System.out.print("Enter cricketer name (or 'done' to finish): ");
            String name = scanner.nextLine();
            if (name.equalsIgnoreCase("done")) {
                break;
            }
            System.out.print("Enter score: ");
            int score = scanner.nextInt();
            scores.put(name, score);
            scanner.nextLine();
        }
        System.out.print("Enter batsman name to search: ");
        String searchName = scanner.nextLine();
```

```java
        Integer score = scores.get(searchName);

        if (score != null) {
                System.out.println(searchName + " scored " + score + "
runs.");
        } else {
            System.out.println("Batsman not found in the list.");
        }
    }
}
```

OUTPUT:

Enter cricketer name (or 'done' to finish): dhoni
Enter score: 121
Enter cricketer name (or 'done' to finish): VR
Enter score: 101
Enter cricketer name (or 'done' to finish): done
Enter batsman name to search: VR
VR scored 101 runs.