Problem-1

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

Code -

package pkg;

import java.util.HashMap;

public class HashMapEx {

public static void main(String[] args) {

// Create a HashMap

HashMap<String, String> map = new HashMap<>();

// Add key-value pairs to the HashMap

map.put("1", "Amit");

map.put("2", "Vidhi");

map.put("3", "Sangam");

// Specify key and value to associate in the HashMap

String key = "4";

String value = "Ayushi";

// Associate the specified value with the specified key

map.put(key, value);

// Display the HashMap

System.out.println("HashMap after adding new key-value pair:");

for (String k : map.keySet()) {

System.out.println("Key: " + k + ", Value: " + map.get(k));

}

}

}

Output-

HashMap after adding new key-value pair:

Key: 1, Value: Amit

Key: 2, Value: Vidhi

Key: 3, Value: Sangam

Key: 4, Value: Ayushi

Problem-2

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

Code-

package pkg;

import java.util.HashMap;

public class HashMapEmpty {

public static void main(String[] args) {

// Create a HashMap

HashMap<String, String> map = new HashMap<>();

// Check if the HashMap is empty

if (map.isEmpty()) {

System.out.println("The HashMap is empty.");

} else {

System.out.println("The HashMap contains key-value mappings.");

}

// Adding some key-value pairs

map.put("key1", "value1");

map.put("key2", "value2");

// Check again if the HashMap is empty

if (map.isEmpty()) {

System.out.println("The HashMap is empty.");

} else {

System.out.println("The HashMap contains key-value mappings.");

}

}

}

Output-

The HashMap is empty.

The HashMap contains key-value mappings.