

# Scala Programming

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## Question:

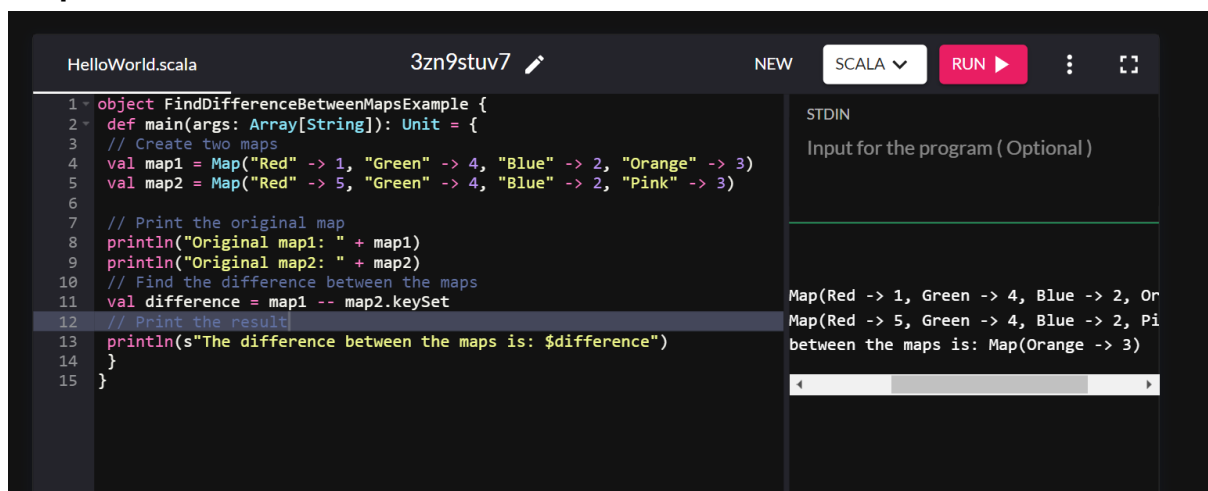
Write a Scala program to create a map and find the difference between two maps.

## Code:

```
object FindDifferenceBetweenMapsExample {
  def main(args: Array[String]): Unit = {
    // Create two maps
    val map1 = Map("Red" -> 1, "Green" -> 4, "Blue" -> 2, "Orange" -> 3)
    val map2 = Map("Red" -> 5, "Green" -> 4, "Blue" -> 2, "Pink" -> 3)

    // Print the original map
    println("Original map1: " + map1)
    println("Original map2: " + map2)
    // Find the difference between the maps
    val difference = map1 -- map2.keySet
    // Print the result
    println(s"The difference between the maps is: $difference")
  }
}
```

## Output:



The screenshot shows a Scala IDE with a file named 'HelloWorld.scala'. The code is as follows:

```
1 object FindDifferenceBetweenMapsExample {
2   def main(args: Array[String]): Unit = {
3     // Create two maps
4     val map1 = Map("Red" -> 1, "Green" -> 4, "Blue" -> 2, "Orange" -> 3)
5     val map2 = Map("Red" -> 5, "Green" -> 4, "Blue" -> 2, "Pink" -> 3)
6
7     // Print the original map
8     println("Original map1: " + map1)
9     println("Original map2: " + map2)
10    // Find the difference between the maps
11    val difference = map1 -- map2.keySet
12    // Print the result
13    println(s"The difference between the maps is: $difference")
14  }
15 }
```

The output on the right side of the IDE is:

```
STDIN
Input for the program ( Optional )

Map(Red -> 1, Green -> 4, Blue -> 2, Orange -> 3)
Map(Red -> 5, Green -> 4, Blue -> 2, Pink -> 3)
The difference between the maps is: Map(Orange -> 3)
```

Original map1: Map(Red -> 1, Green -> 4, Blue -> 2, Orange -> 3)

Original map2: Map(Red -> 5, Green -> 4, Blue -> 2, Pink -> 3)

The difference between the maps is: Map(Orange -> 3)

In the key sets of both map1 and map2, every element except orange is present. Hence to find the difference between the two maps, we use `map1-map2.keySet`. Orange is visible as the output.