Scala programming

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1. The "MathUtils" object contains the factorial method. This method calculates the factorial of a given number using recursion. If the number is 0 or 1, it returns 1. Otherwise, it recursively calls itself with n-1 and multiplies the result by n.

The "Main" object contains the main method where you can test the factorial method. In this example, it calculates the factorial of the number 4 and 10 and prints the result.

```
Code;

object MathUtils {

def factorial(n: Int): BigInt = {

if (n == 0 || n == 1) {

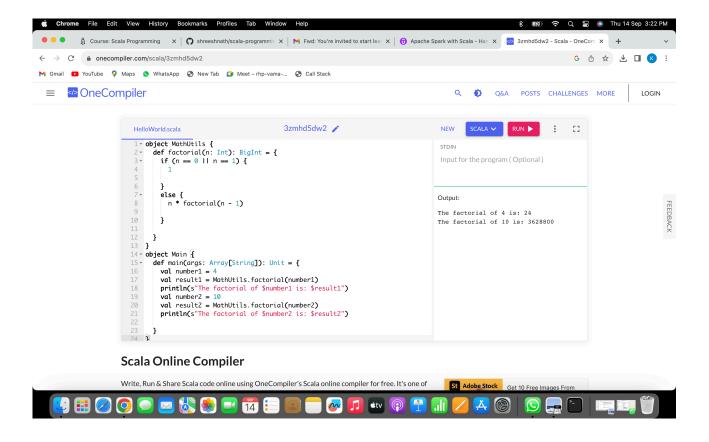
1

}

else {
```

```
n * factorial(n - 1)
  }
 }
}
object Main {
 def main(args: Array[String]): Unit = {
  val\ number1 = 4
  val result1 = MathUtils.factorial(number1)
  println(s"The factorial of $number1 is: $result1")
  val number2 = 10
  val result2 = MathUtils.factorial(number2)
  println(s"The factorial of $number2 is: $result2")
}
}
```

Output;



Changing ,number1=0 and number2 = 1,

