LAB-12

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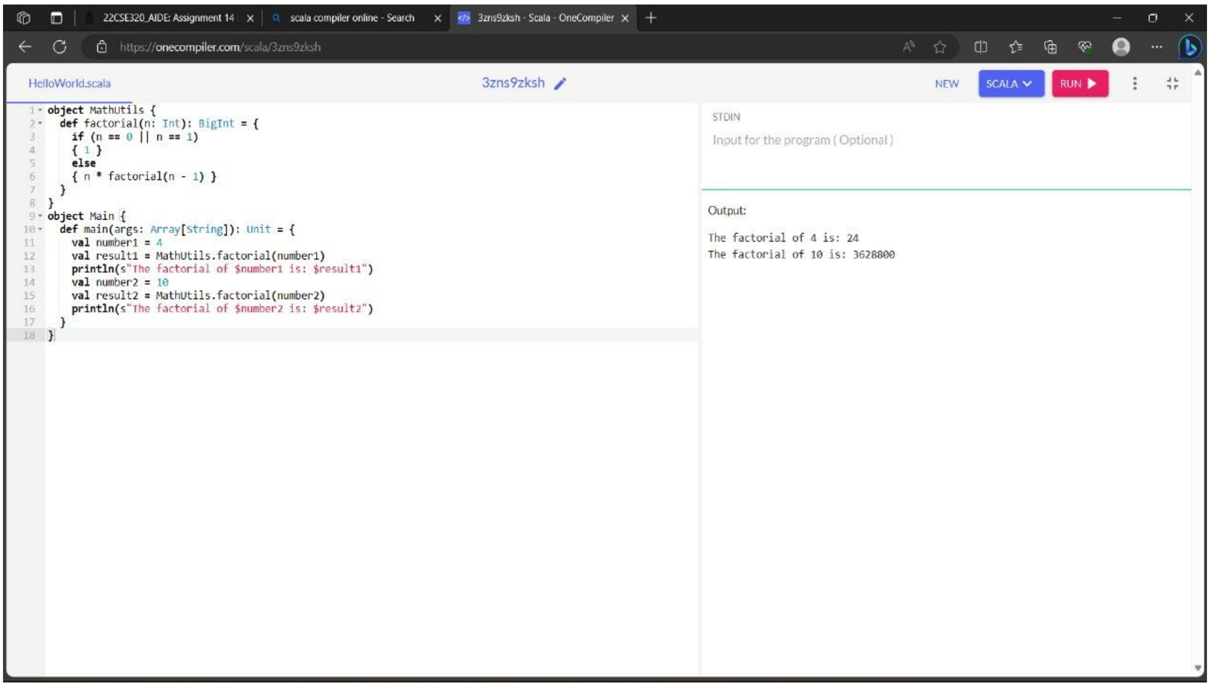
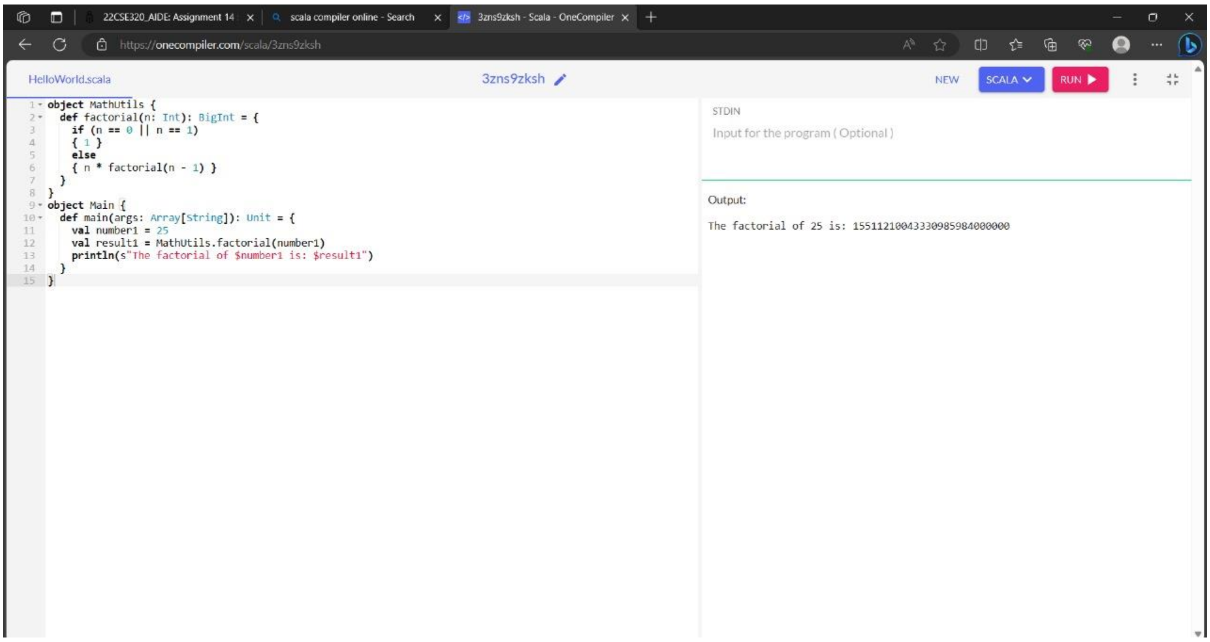
22BTRAD001


22CSE320_AIDE: Assignment 14
scala compiler online - Search
3zns9zksh - Scala - OneCompiler
https://onecompiler.com/scala/3zns9zksh
HelloWorld.scala
3zns9zksh
NEW
SCALA
RUN
STDIN
Input for the program (Optional)
Output:

```scala
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")
  }
}
```

```
The factorial of 4 is: 24
The factorial of 10 is: 3628800
```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Input for the program (Optional)
Output:

```scala
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 = 25
    val result1 = MathUtils.factorial(number1)
    println(s"The factorial of $number1 is: $result1")
  }
}
```

```
The factorial of 25 is: 15511210043330985984000000
```

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:

```
The factorial of 4 is: 24
The factorial of 10 is: 3628800
```