SCALA PROGRAMMING

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```scala
import scala.annotation.tailrec
// 1 - basic recursive factorial method
def factorial(n: Int): Int = if (n == 0) 1 else n * factorial(n-1)
// 2 - tail-recursive factorial method
def factorial2(n: Long): Unit = {
@tailrec
def factorialAccumulator(acc: Long, n: Long): Long = {
if (n == 0) acc else factorialAccumulator(n*acc, n-1)
}
println(factorialAccumulator(1,n));
}
val a = scala.io.StdIn.readInt()
val b = scala.io.StdIn.readInt()
val c = scala.io.StdIn.readInt()
factorial2(a);
factorial2(b);
factorial2(c);
```

STDIN

5
8
10

Output:

120
40320
3628800