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**22BTRAD019**

**SCALA PROGRAMMING**

**CODE:-**

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()

factorial2(a)

val b = scala.io.StdIn.readInt()

factorial2(b)

val c = scala.io.StdIn.readInt()

