**A Fibonacci series (starting from 1) written in order without any spaces in between, thus**

**producing a sequence of digits.**

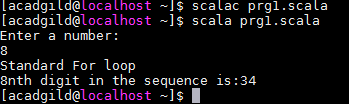
**Write a Scala application to find the Nth digit in the sequence.**

**○ Write the function using standard for loop**

object fibseries  
{  
 def main(args: Array[String]): Unit ={  
 println("Enter a number: ")  
 var num:Int = readLine().toInt  
 var n1=0  
 var n2=1  
 var a: Int=0;  
 var b: Int=0;

println("Standard For loop")  
 for(a <-1 to num){  
 val sumOfPrevTwo = n1+n2  
 n1=n2  
 n2 = sumOfPrevTwo  
 }  
 println(num +"nth digit in the sequence is:" +n2)  
 }  
}

**OUTPUT:**



**○ Write the function using recursion**

object fibseriesrecursion  
{  
 def main(args: Array[String]): Unit ={  
 println("Enter a number: ")  
 var num:Int =readLine().toInt  
 println("Using Recursion")  
 println(num + "nth digit in the sequence is: " +fib(num))  
 def fib(n:Int): Int =  
 if (n<2)  
 1  
 else  
 fib(n-1+fib(n-2))  
 }  
}

**OUTPUT**

