**ASSIGNMENT13.2**

**Problem Statement:**

A Fibonacci series(startingfrom 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.

Write the function usingrecursionSolution:-

The Scala Application for the above Problem Statement is as follows:-objectFibonacci2{

Defmain (args: Array[String]):Unit={println("Enter a number:")

varnum:Int=scala.io.StdIn.readLine().toIntvarnum1 =0

varnum2 =1vara: Int=0;var b:Int =0;

println("UsingStandardfor loop")for(a<- 1tonum){

valsumOfPrevTwo= num1+num2num1=num2

num2=sumOfPrevTwo

}

println(num+ "digit inthesequenceis:"+num2)println("UsingRecursion")

println(num+ "digit inthesequenceis:"+fib1(num))

}

deffib1(n:Int):Int=if(n< 2)

1

else

fib1(n-1)+ fib1(n-2)

}

