Java Week 3: Q1

Due on 2020-10-08, 23:59 IST

This program is related to the generation of Fibonacci numbers.
For example: 0, 1, 1, 2, 3, 5, 8, 13,... is a Fibonacci sequence where 13 is the 8th Fibonacci number. A partial code is given and you have to complete the code as per the instruction given as comments.

Private Test cases used for evaluation		Input	Expected Output	Actual Output	Status
Test Case 1		1	0	0\n	Passed
Test Case 2		2	1	1\n	Passed
Test Case 3		3	1	1\n	Passed

The due date for submitting this assignment has passed.
3 out of 3 tests passed.
You scored 100.0/100.

Assignment submitted on 2020-10-08, 23:36 IST
Your last recorded submission was :

```
1  import java.util.Scanner; //This package for reading input
2  public class Fibonacci {
3
4      public static void main(String args[]) {
5        Scanner sc = new Scanner(System.in);
6        int n=sc.nextInt(); //Read an integer
7            System.out.println(fib(n)); //Generate and print the n-th Fibonacci
8                                        //number
9      }
10  static int fib(int n) {
11
12  int j=n-1;
13          if( j == 0 )
14          {
15              return 0;
16          }
17          else if( j == 1 )
18          {
19              return 1;
20          }
21          else
22          {
23              return (fib(n-2)+fib(n-1));
24          }
25  }
26  }
```

Sample solutions (Provided by instructor)

```
1  import java.util.Scanner; //This package for reading input
2  public class Fibonacci {
3
4      public static void main(String args[]) {
5        Scanner sc = new Scanner(System.in);
6        int n=sc.nextInt(); //Read an integer
7            System.out.println(fib(n)); //Generate and print the n-th Fibonacci
8                                        //number
9      }
10  static int fib(int n) {
11
12      if (n==1)        //Terminate condition
13          return 0;
14      else if(n==2)
15          return 1;
16      return fib(n - 1) + fib(n - 2); //Recursive call of function
17  }
18  }
```