

## Java Week 3: Q1

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

### Course outline

How does an NPTEL online course work?

Week 0 : Assignment 0

Week 1 :

Week 2 :

Week 3 :

- Lecture 11 : Java Static Scope Rule
- Lecture 12 : Demonstration-V
- Lecture 13 : Inheritance
- Lecture 14 : Demonstration-VI
- Lecture 15 : Information Hiding
- Quiz: Assignment 3
- Java Week 3: Q1
- Java Week 3: Q2
- Java Week 3: Q3
- Java Week 3: Q4
- Java Week 3: Q5
- Feedback For Week 3

Week 4 :

Week 5 :

Week 6 :

Week 7 :

Week 8 :

Week 9 :

Week 10 :

Week 11 :

Week 12 :

Solution

DOWNLOAD VIDEOS

Text Transcripts

Programming Test - (April 11 - 10AM - 12 PM)

Programming Test - (April 11 - 8PM - 10 PM)

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 8<sup>th</sup> 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

Test Case 1

Test Case 2

Test Case 3

Input	Expected Output	Actual Output	Status
1	0	0\n	Passed
2	1	1\n	Passed
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 }
```