X

Java Week 5: Q2

Due on 2020-03-05, 23:59 IST

This program is to find the GCD (greatest common divisor) of two integers writing a recursive function `findGCD(n1,n2)`. Your function should return -1, if the argument(s) is(are) other than positive number(s).

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

The due date for submitting this assignment has passed.
2 out of 2 tests passed.
You scored 100.0/100.

Assignment submitted on 2020-03-05, 23:03 IST
Your last recorded submission was :

```
1  import java.util.Scanner;
2
3  interface GCD {
4      public int findGCD(int n1,int n2);
5  }
6  //Create a class B, which implements the interface GCD.
7  class B{
8    public int findGCD(int n1,int n2){
9
10   if(n1 < 0 || n2 < 0)
11     return -1;
12   else if( n2 != 0 )
13     return findGCD(n2,n1%n2);
```

```
  else
    return n1;
  }
}
public class Question5_2{
        public static void main (String[] args){
          B a = new B();   //Create an object of class B
            // Read two numbers from the keyboard
            Scanner sc = new Scanner(System.in);
             int p1 = sc.nextInt();
             int p2 = sc.nextInt();
            System.out.print(a.findGCD(p1,p2));
    }
}
```

Sample solutions (Provided by instructor)

Select the Language . Java ▼

```
import java.util.Scanner;

interface GCD {
    public int findGCD(int n1,int n2);
}
class B implements GCD {
    int n1,n2;

    //Create a method to calculate GCD
    public int findGCD(int n1, int n2){
        if(n1==0&& n2==0) {
            return -1;
        }
        else if(n2 == 0){
            return n1;
        }

        else {
            return findGCD(n2, n1%n2);
        }
        }
 }
public class Question5_2{
        public static void main (String[] args){
          B a = new B();   //Create an object of class B
            // Read two numbers from the keyboard
            Scanner sc = new Scanner(System.in);
             int p1 = sc.nextInt();
             int p2 = sc.nextInt();
            System.out.print(a.findGCD(p1,p2));
    }
}

```

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