Fall 2016

CSE220 LAB

Quiz 2

1. Write the **ComplexNumber** class so that the following code generates the output below:

|  |
| --- |
| **public class Tester {** |
| **public static void main(String[] args) {** |
| **RealNumberrn = new ComplexNumber();** |
| **System.out.println(rn);** |
|  |
| **System.out.println("--------------------");** |
|  |
| **rn = new ComplexNumber(5, 7);** |
| **System.out.println(rn);** |
|  |
| **System.out.println("--------------------");** |
| **ComplexNumbercn = new ComplexNumber();** |
| **cn.check();** |
| **}** |
| **}** |
| **public class RealNumber {** |
| **private double realValue;** |
| **public double getRealValue() {** |
| **return realValue;** |
| **}** |
| **public void setRealValue(double r) {** |
| **realValue = r;** |
| **}** |
| **public RealNumber() {** |
| **this(0);** |
| **}** |
| **public RealNumber(double r) {** |
| **setRealValue(r);** |
| **}** |
| **public String toString() {** |
| **return "RealPart: "+getRealValue();** |
| **}** |
| **public void ping() {** |
| **System.out.println("I'm in RealNumber class");** |
| **}** |
| **}** |

**Expected answer**

**RealPart: 1.0**

**ImaginaryPart: 1.0**

**--------------------**

**RealPart: 5.0**

**ImaginaryPart: 7.0**

**--------------------**

**I'm in ComplexNumber class**

**I'm in RealNumber class**

**Checking ended.**

1. Write the **remove** function bellow which takes in an array of numbers and non numerical values mixed. This function **removes** the non numerical characters and returns a **compact** array which only has the numbers. For example output of the following code is:

**2 . @ 3 ( ( % 4 6 1 ; : 1 ^**

**2 3 4 6 1 1**

**public class Test{**

**public static char [] remove (char [] input){**

**//Your code here**

**}**

**public static void main(String [] args){**

**char [] mixedArray = {“2”,”.”,”@”  
,”3”,”(“,”(“,”%”,”4”,”6”,”1”,”;”,”:”,”1”,”^”};**

**for (int i = 0; i<mixedArray.length; i++) {**

**System.out.print(mixedArray[i] + " ");**

**}**

**System.out.println();**

**char [] no = remove(mixedArray);**

**for (int i = 0; i<no.length; i++) {**

**System.out.print(no[i] + " ");**

**}**

**}**

**}**

Hint: Ascii of 0 – 9 is 48 - 57