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<b>Status</b>	Finished
<b>Started</b>	Saturday, 5 October 2024, 8:29 PM
<b>Completed</b>	Saturday, 5 October 2024, 9:44 PM
<b>Duration</b>	1 hour 15 mins

## Question 1

Correct

Marked out of 5.00

Create a class called "Circle" with a radius attribute. You can access and modify this attribute using getter and setter methods. Calculate the area and circumference of the circle.

Area of Circle =  $\pi r^2$

Circumference =  $2\pi r$

Input:

2

Output:

Area = 12.57

Circumference = 12.57

For example:

Test	Input	Result
1	4	Area = 50.27 Circumference = 25.13

Answer: (penalty regime: 0 %)

Reset answer

```

1 import java.io.*;
2 import java.util.*;
3 class Circle
4 {
5     private double radius;
6     //double pi=22/7;
7     public Circle(double radius){
8         this.radius=radius;
9     }
10
11     public void setRadius(double radius){
12         // set the radius
13         this.radius=radius;
14     }
15
16     public double getRadius() {
17         return radius;
18     }
19
20 }
21     public double calculateArea() { // comple
22
23         return Math.PI*getRadius()*getRadius();
24     }
25
26     public double calculateCircumference()
27         // complete the statement
28         return 2*Math.PI*getRadius();
29 }
30 }
31 public class prog{
32     public static void main(String[] args) {
33         int r;
34         Scanner sc= new Scanner(System.in);
35         r=sc.nextInt();
36         Circle c= new Circle(r);
37         System.out.println("Area = "+String.fo
38         System.out.println("Circumference = "+S
39
40

```

```

40
41     }
42 }
43

```

	Test	Input	Expected	Got	
✓	1	4	Area = 50.27 Circumference = 25.13	Area = 50.27 Circumference = 25.13	✓
✓	2	6	Area = 113.10 Circumference = 37.70	Area = 113.10 Circumference = 37.70	✓
✓	3	2	Area = 12.57 Circumference = 12.57	Area = 12.57 Circumference = 12.57	✓

Passed all tests! ✓

## Question 2

Correct

Marked out of 5.00

Create a Class Mobile with the attributes listed below,

```
private String manufacturer;
private String operating_system;
public String color;
private int cost;
```

Define a Parameterized constructor to initialize the above instance variables.

Define getter and setter methods for the attributes above.

for example : setter method for manufacturer is

```
void setManufacturer(String manufacturer){
    this.manufacturer= manufacturer;
}
```

```
String getManufacturer(){
    return manufacturer;}

```

Display the object details by overriding the toString() method.

**For example:**

Test	Result
1	manufacturer = Redmi operating_system = Andriod color = Blue cost = 34000

**Answer:** (penalty regime: 0 %)

```
1 class Mobile{
2     String m,o,c;
3     int p;
4     Mobile( String m,String o,String c,int p){
5         this.m=m;
6         this.o=o;
7         this.c=c;
8         this.p=p;
9     }
10    public void setM(String m){
11        this.m=m;
12    }
13    public void setO( String o){
14        this.o=o;
15    }
16    public void setC(String c){
17        this.c=c;
18    }
19    public void setP(int p){
20        this.p=p;
21    }
22    public String getM(){
23        return m;
24    }
25    public String getO(){
26        return o;
27    }
28    public String getC(){
29        return c;
30    }
31    public int getP(){
32        return p;
33    }
34 }
```

```

33     }
34     public String toString(){
35         return "manufacturer = "+m+"\n"+"opera
36     }
37 }
38 }
39 }
40 public class Main{
41     public static void main(String[] args){
42         Mobile l=new Mobile("Redmi","Andriod",
43             System.out.println(l.toString());
44     }
45 }

```

	Test	Expected	Got	
✓	1	manufacturer = Redmi operating_system = Andriod color = Blue cost = 34000	manufacturer = Redmi operating_system = Andriod color = Blue cost = 34000	✓

Passed all tests! ✓

## Question 3

Incorrect

Marked out of 5.00

Create a class Student with two private attributes, name and roll number. Create three objects by invoking different constructors available in the class Student.

Student()

Student(String name)

Student(String name, int rollno)

**Input:**

No input

**Output:**

**No-arg constructor is invoked**

**1 arg constructor is invoked**

**2 arg constructor is invoked**

**Name =null , Roll no = 0**

**Name =Rajalakshmi , Roll no = 0**

**Name =Lakshmi , Roll no = 101**

**For example:**

Test	Result
1	No-arg constructor is invoked 1 arg constructor is invoked 2 arg constructor is invoked Name =null , Roll no = 0 Name =Rajalakshmi , Roll no = 0 Name =Lakshmi , Roll no = 101

**Answer:** (penalty regime: 0 %)

```
1 class Student{
2     String n;
3     int r;
4     Student(){
5         this.n=null;
6         this.r=0;
7         System.out.println("No-arg constructor
8     }
9     Student(String na){
10        n=na;
11        this.r=0;
12        System.out.println("1 arg constructor
13    }
14    Student(String na,int rn){
15        n=na;
16        r=rn;
17        System.out.println("2 arg constructor
18    }
19    public void get(){
20        System.out.println("Name =" +n+", "+"Rol
21    }
22 }
23 public class Main{
24     public static void main(String[] args){
25         Student s1=new Student();
26         s1.get();
27         Student s2=new Student("Rajalakshmi");
28         s2.get();
29         Student s3=new Student("Lakshmi",101);
30         s3.get();
31     }
```

```
32 |}  
33 |}
```

### Syntax Error(s)

Main.java:16: error: cannot find symbol

    r=ra;

        ^

symbol:   variable ra

location: class Student

1 error

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