

# CS23333-Object Oriented Programming Using Java-2023

Dashboard / My courses / CS23333-OOPJ-2023 / Lab-04-Classes and Objects / Lab-04-Logic Building

## Quiz navigation



Show one page at a time


Finish review

Status	Finished
Started	Sunday, 6 October 2024, 12:42 AM
Completed	Sunday, 6 October 2024, 12:44 AM
Duration	2 mins 16 secs

Question **1**

Correct

Marked out of 5.00

 Flag question

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 public class mobile{  
2     private String man;  
3     private String os;  
4     public String clr;  
5     private int cost;  
6     public mobile(String man,String os,String clr,int cost){  
7         this.man=man;  
8         this.os=os;  
9         this.clr=clr;  
10        this.cost=cost;  
11    }  
12    public String toString(){  
13        return "manufacturer = "+man+"\n"+"operating_system = "+os+"\n"+"color = "+ clr+"\n"+"cost = "+cost;  
14    }  
15    public static void main(String[]args){  
16        mobile mobile=new mobile("Redmi", "Andriod", "Blue", 34000);  
17        System.out.println(mobile);  
18    }  
19 }  
20  
21
```


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 **2**

Correct

Marked out of 5.00

 Flag question

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	public class stud{	
2	private String name;	
3	private int roll;	
4	public stud(){	
5	System.out.println("No-arg constructor is invoked");	
6	name=null;	
7	roll=0;	
8	}	
9		
10	public stud(String name){	
11	System.out.println("1 arg constructor is invoked");	
12	this.name=name;	
13	roll=0;	
14	}	
15		
16	public stud(String name,int roll){	
17	System.out.println("2 arg constructor is invoked");	
18	this.name=name;	
19	this.roll=roll;	
20	}	
21		
22		
23	public static void main (String[]args){	
24	stud s1=new stud();	
25	stud s2=new stud("Rajalakshmi");	
26	stud s3=new stud("Lakshmi",101);	
27	System.out.println("Name =" +s1.name+" , Roll no = "+s2.roll);	
28	System.out.println("Name =" +s2.name+" , Roll no = "+s2.roll);	
29	System.out.println("Name =" +s3.name+" , Roll no = "+s3.roll);	
30	}	
31	}	
32		

Test	Expected	Got	
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	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	
Passed all tests!			

Question **3**  
Correct  
Marked out of 5.00  
[Flag question](#)

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.Scanner;
3	class Circle
4	{
5	private double radius;
6	public Circle(double radius){
7	// set the instance variable radius
8	this.radius =radius;
9	}
10	public void setRadius(double radius){
11	// set the radius
12	this.radius=radius;
13	
14	}
15	public double getRadius() {
16	// return the radius
17	return radius;
18	
19	}
20	public double calculateArea() { // complete the below statement
21	return Math.PI*radius*radius;
22	
23	}
24	public double calculateCircumference() {
25	// complete the statement

```

26         return 2*Math.PI*radius;
27     }
28 }
29 class prog{
30     public static void main(String[] args) {
31         int r;
32         Scanner sc= new Scanner(System.in);
33         r=sc.nextInt();
34         Circle c= new Circle(r);
35         System.out.println("Area = "+String.format("%.2f", c.calculateArea()));
36         // invoke the calculateCircumference method
37         System.out.println("Circumference = "+String.format("%.2f" , c.calculateCircumference()));
38     }
39     sc.close();
40 }
41 }
42

```

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!

[Finish review](#)

[◀ Lab-04-MCQ](#)

Jump to...

[Number of Primes in a specified range ▶](#)