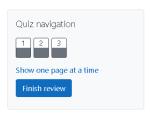
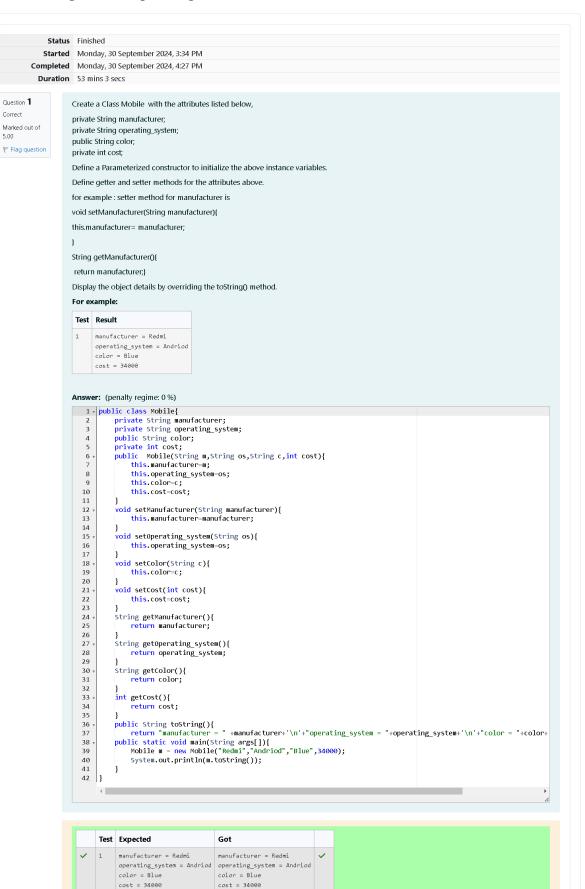
## CS23333-Object Oriented Programming Using Java-2023

Passed all tests! <

Correct





Question 2
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 = πr<sup>2</sup>

Circumference = 2πr

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 v import java.util.Scanner;
   3 1
        {
                rivate double radius;
              public Circle(double radius){
    // set the instance variable radius
                    this.radius=radius;
             public void setRadius(double radius){
   // set the radius
   this.radius=radius;
 10
 11
12
 13
 14
             public double getRadius()
  // return the radius
 15
 16
                  return radius;
 18
 19
              public double calculateArea() { // complete the below statement
    return 3.14159*radius*radius;
 20
21
 22
23
 24
25
              public double calculateCircumference() {
   // complete the statement
 26
27
                  return 2*3.14159*radius;
 28
        class prog{
   public static void main(String[] args) {
 29
 30
 31
                    int r:
 32
                    Scanner sc= new Scanner(System.in);
 33
34
                    r=sc.nextInt();
Circle c= new Circle(r);
                    System.out.println("Area = "+String.format("%.2f", c.calculateArea()));
// invoke the calculatecircumference method
System.out.println("Circumference = "+String.format("%.2f",c.calculateCircumference()));
 35
36
 37
 38
 39
              }
        }
 40
```

	Test	Input	Expected	Got	
<b>~</b>	1	4	Area = 50.27 Circumference = 25.13		<b>~</b>
~	2	6	Area = 113.10 Circumference = 37.70		<b>~</b>
~	3	2	Area = 12.57 Circumference = 12.57		~

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

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

Finish review