

King Abdulaziz University
Faculty of Engineering
Electrical and Computer Engineering

EE-202-Object-Oriented Computer Programming
Practice Lab-1



Q-1 What is the output of the following program?

```
public class Operator {  
    public static void main( String args[] )  
    {  
        int x = 100;  
        int y = 22;  
        System.out.println( x * y + 4 / 3 );  
    }  
}
```

Q-2 What is output by the following line of code?

```
System.out.println( ( 8 * 4 * 2 + 6 ) / 2 + 4 );
```

Q-3 Write an application that displays the numbers 1 to 4 on the same line, with each pair of adjacent numbers separated by one space

- a) Use System.out.println statement.
- b) Use four System.out.print statements.
- c) Use System.out.printf statement

Q-4 Write an application that asks the user to enter 2 integers, obtains them from user and displays the sum, difference, product, and quotient of the 2 integers. The screen dialogue should appear as follows-

```
Enter first integer:  
Enter second integer:  
Sum is:  
Product is:  
Difference is:  
Quotient is:
```

Q-5 Write a program that asks for a person's first name and last name and then display on the screen format "Good Morning First Name Last Name. How are you?"

Q-6 Write an app that displays a box, an oval, an arrow and a diamond using asterisks (*), as follows:



Q-7 Write a Java program that takes a number as input and prints its multiplication table up to 10

Test Data:

Input a number: 8

Expected Output :

8 x 1 = 8

8 x 2 = 16

8 x 3 = 24

...

8 x 10 = 80

Q-8 Write a Java program to compute the specified expressions and print the output.

Test Data:

$((25.5 * 3.5 - 3.5 * 3.5) / (40.5 - 4.5))$

Expected Output

2.138889

Q-9 Write a Java program to compute a specified formula.

Specified Formula :

$4.0 * (1 - (1.0/3) + (1.0/5) - (1.0/7) + (1.0/9) - (1.0/11))$

Expected Output

2.976046

Q-10 Write a Java program to print the area and perimeter of a circle.

Test Data:

Radius = 7.5

Expected Output

Perimeter is = 47.123890

Area is = 176.714587

Q-11 Write a Java program that reads a number and display the square, cube , and fourth power.

Expected Output:

Input number:15

Square: 225

Cube: 3375

Fourth power: 50625

Q-12 Given that $y = ax^3 + 7$, which of the following are correct Java statements for this equation?

a) $y = a * x * x * x + 7;$

b) $y = a * x * x * (x + 7);$

c) $y = (a * x) * x * (x + 7);$

d) $y = (a * x) * x * x + 7;$

e) $y = a * (x * x * x) + 7;$

f) $y = a * x * (x * x + 7);$

Q-13 State the order of evaluation of the operators in each of the following Java statements, and

Show the value of x after each statement is performed:

a) $x = 7 + 3 * 6 / 2 - 1;$

b) $x = 2 \% 2 + 2 * 2 - 2 / 2;$

c) $x = (3 * 9 * (3 + (9 * 3 / (3))))$

