

Cognizant Technology Solutions

Language Fundamental & Operator Exercise

CATP Java Team
5/20/2012

For The Associates:

The documents details two flavors of problem statements

- **Statement # 1:** Few problem solutions have been provided for associates should analyze the program and write down the program output. This will enhance the analyzing skills of associates and also understand “why” part of java programming feature. The associates can then try running the program in eclipse and check if the output with what they have written.
- **Stamen # 2:** There are some problem statements provided similar to the final assessment and associates need to solve it. This will enhance the programming skills of the associates.
IMPORTANT: These exercises will gear you up for the core java assessment so please develop/analyze the exercise independently. In case you are stuck up reach out to the trainers.

Exercises:

1. What is the output of running the following code?

```
public class Tester {  
    public static void main(String[] args) {  
        boolean flag = true;  
        int x = 5;  
        int result = (8 * 2) % x;  
        System.out.print(!(result > 0) ^ true ^ (flag = false));  
        System.out.print(flag);  
    }  
}
```

2. What is the output of running the following code?

```
public static void main(String[] args) {  
    int x = 0, y = 0;  
    x = 5 + y++;  
    System.out.print(x + "" + y);  
    x = 0;  
    y = 0;  
    x = 5 + ++y;  
    System.out.print(x + "" + y);  
}
```

3. What will be the output of the program?

```
class Tester
{
    public static void main(String [] args)
    {
        int x = 100;
        double y = 100.1;
        boolean b = (x = y);
        System.out.println(b);
    }
}
```

4. What is the result of compiling and running the following code?

```
public static void main(String[] args) {
    int x = 0, y = 0;
    x = 5 + y++;
    System.out.print(x + "" + y);
    x = 0;
    y = 0;
    x = 5 + ++y;
    System.out.print(x + "" + y);
}
```

5. What is the result of compiling and running the following code?

```
public class Test {

    public static void main(String... args) {

        int a =5 , b=6, c =7;

        System.out.println("Value is "+ b +c);

        System.out.println(a + b +c);

        System.out.println("String "+(b+c));

    }

}
```

6. What is the result of compiling and running the following code?

```
public class Test {

    public static void main() {

        System.out.println("hello";

    }

}
```

7. Create a class with a method which can accept a String name and print a message "hello<name>"

Class Name	MessagePrinter
Method Name	printMessage
Method Description	Prints the message
Argument	String name
Return Type	Void
Logic	Print the message using the console output command.

8. Create a class which contains methods for finding the sum and difference of two numbers

Class Name	Calculator
Method Name	calculateSum
Method Description	Calculates the sum of two numbers
Argument	int number1, int number2
Return Type	int - Sum
Logic	Calculate the sum of the two numbers number1 nad number2 and return the sum.
Method Name	calculateDifference
Method Description	Calculates the difference between two numbers
Argument	int number1 , int number2
Return Type	int - difference
Logic	Calculate the difference between the numbers number1 and number2 and return the difference.