

Tutorial 04

Expressions | Operators | Conditional Statements

Exercise 1:

```
A. Which of the following expressions results in 45.37?
  1. (int)(45.378 * 100) / 100
  2. (int) (45.378 * 100) / 100.0
  3. (int) (45.378 * 100 / 100)
  4. (int) (45.378) * 100 / 100.0
B. What is y displayed?
  public class Test {
     public static void main(String[] args) {
       int x = 1;
       int y = x + x++;
       System.out.println("y is " + y);
     }
  1. y is 1
  2. y is 2
  3. y is 3
  4. y is 4
```

C. What is the value of i printed in the following code?

```
public class Test {
  public static void main(String[] args) {
    int j = 0;
    int i = ++j + j * 5;
    System.out.println("What is i? " + i);
  }
}
1. 0
2. 1
3. 5
4. 6
```

- **D.** Assuming that x is 1, show the result of the following Boolean expressions:
 - 1. (x > 0)
 - 2. (x < 0)
 - 3. (x != 0)
 - 4. (x >= 0)
 - 5. (x != 1)

Exercise 2:

Write a program that declares two integer variables x and y and initializes their values to 0. Then it reads the value of variable y and assigns 1 to x if y is greater than 0. Finally it prints the value of variable x.

Here are two sample runs:

```
Enter value of y: 5 ↵
Value of x is 1
```

```
Enter value of y: 0 4
Value of x is 0
```

Exercise 3

Write a program that reads the performance level of an employee (between 0 and 100) and his salary. Then it increases the salary by 3% if performance level is greater than or equal to 90. Here are two sample runs:

```
Enter performance level: 50 년
Enter base salary: 5000 년
Salary is 5000.0
```

```
Enter performance level: 90 년
Enter base salary: 10000 년
Salary is 10300.0
```

Exercise 4

Write a program that reads values of seconds, minutes and hours as integers, then prints the equivalent number of seconds

Exercise 5

Write a program that reads a number of seconds, and converts it to the regular form of h:m:s, then prints the results.