

# COMP202

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Which of the following is syntactically correct?

```
int x = 10;
int y = 20;
boolean equalValues = false;
```

<pre>if (x == y) { ... }</pre>	<pre>if (x = y) { ... }</pre>	<pre>if(x) { ..... }</pre>	<pre>if (equalValues) { ... }</pre>
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## Parameter Passing in Java

What are the values displayed after compiling and running the following?

```
public class Test
{
    public static void main(String[] args)
    {
        int testVariable = 2;
        addOne(testVariable);
        System.out.println("value of testVariable is:" + testVariable);
    }

    public static void addOne(int inputValue)
    {
        inputValue++;
        System.out.println("Inside addOne; parameter inputValue 's:' + inputValue);
    }
}
```

Infinite Classroom

Imagine there's a class with an infinite number of seats with the restriction that each row has 5 seats in it. Write a program that prompts the user to enter the number of students and then proceeds as announcing the seat numbers of the students. For instance, if there are 8 students in the class, your program should display:

Seat 1, Seat 2, Seat 3, Seat 4, Seat 5  
Seat 1, Seat 2, Seat 3

## Guess in 20 Questions with a Twist

Write a program that generates a random integer  $r$  between 1 and 20. Then it prompts the user to guess a value. At each step, your program should compare the user-entered value with  $r$  and announce: "larger, smaller, or You win!" if the guessed value is larger, smaller or equal to  $r$  respectively. The only catch is that the user is restricted to alternate his guesses between even and odd numbers. In other words, if his first value is an odd number, in the next step he has to choose an even number and so on. Ensure that your program restricts the user to do so. End the game in 20 steps and announce "You Lose!" if the user doesn't win by then.