

if statements more!

Mr. Poole
Java

if statements

```
if(5 > 16)
{
    System.out.println(z);
}
```

What if we want to add more arguments???

if statements

We want to check if:

x is greater than 16 **AND** **x** is not equal to 20

```
if (x > 16) {  
    if (x != 20) {  
  
    }  
}
```

The Logical AND (&&)

Definition:

The logical AND (&&) operator (logical conjunction) for a set of operands is true if and only if all of its operands are true.

((TRUE) && (TRUE))	= TRUE
((TRUE) && (FALSE))	= FALSE
((FALSE) && (TRUE))	= FALSE
((FALSE) && (FALSE))	= FALSE

if statements - AND

We want to check if:

x is greater than 16 **AND** **x** is not equal to 20

```
if (x > 16) {  
    if (x != 20) {  
  
    }  
}
```

```
if ( (x > 16) && (x != 20) ) {  
  
}
```

if statements - OR

We want to check if:

x is greater than 16 **OR** **x** is not equal to 20

```
if (x > 16) {  
  
}  
if (x != 20) {  
  
}
```

The Logical OR (||)

Definition:

The logical OR (||) operator (logical disjunction) for a set of operands is true if and only if one or more of its operands is true.

((TRUE) (TRUE))	= TRUE
((TRUE) (FALSE))	= TRUE
((FALSE) (TRUE))	= TRUE
((FALSE) (FALSE))	= FALSE

if statements - OR

We want to check if:

x is greater than 16 **OR** **x** is not equal to 20

```
if (x > 16) {  
  
}  
if (x != 20) {  
  
}
```

```
if ( (x > 16) || (x != 20) ) {  
  
}
```


if Statement Lab: Part 1

Redo lab 010 but using Scanner to input two numbers

- Write a program that takes in 2 int variables from the user
- Write a message out to the screen if the two values are different or equal!
- Verify your code works by trying different int value

if Statement Lab: Part 2

- Write a program that takes in 3 int variables from the user
- Using **three** if statements
 - Find the largest integer
- Using another **three** if statements
 - Find the smallest integer
- Print out the largest and smallest integers
- Verify your code works by trying different int value