

IF Statements

What is an “IF” statement?

An IF statement works similar to Boolean

It evaluates if a statement is true and then executes a specific block of code

It is written as follows:

```
if (STATEMENT TO EVALUATE){  
    THIS CODE WILL BE EXECUTED IF TRUE  
}
```



IF statement demo



Lets try it

```
var x = 4;
```

```
if (x > 2){
```

```
    alert("Im in an IF statement");
```

```
}
```



Comparison Operators

==	Equal To
!=	Not Equal To
>	Greater Than
<	Less Than
>=	Greater than or equal to
<=	Less than or equal to

Equal To ==

Equal To is used by the == symbols in your code

Equal To will compare two data types to evaluate if they are equal

Note the data types must be the same for a reliable comparison



Lets try it

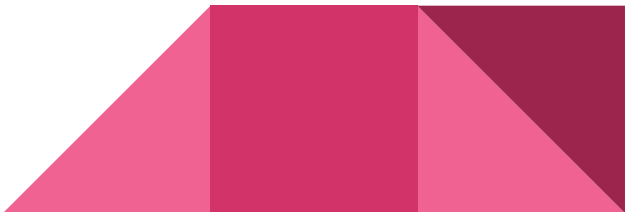
```
var x = 5;
```

```
var y = 5;
```

```
if(x == y){
```

```
    alert("It worked!")
```

```
}
```



Not Equal To !=

Not Equal To is used by the != symbols in your code

Not Equal To will compare two data types to evaluate if they are equal

Note the data types must be the same for a reliable comparison



Lets try it

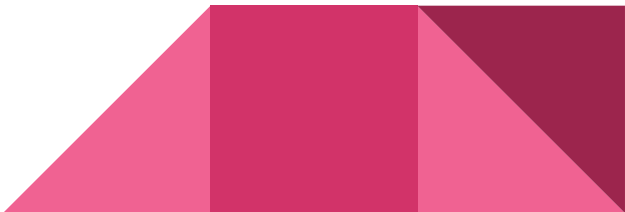
```
var x = 5;
```

```
var y = 4;
```

```
if(x != y){
```

```
    alert("It worked!")
```

```
}
```



Greater Than >

Greater Than is used by the > symbol in your code

Greater Than will compare two data types to evaluate if they are if the first value is greater than the second value

Note the data types must be the same for a reliable comparison



Less Than <

Less Than is used by the < symbol in your code

Less Than will compare two data types to evaluate if they are if the first value is less than the second value

Note the data types must be the same for a reliable comparison



Lets try it

```
var x = 5;
```

```
var y = 10;
```

```
if(x != y){
```

```
    alert("Not equal to worked!")
```

```
}
```

```
if(x < y){
```

```
    alert("Less than worked!")
```

```
}
```

```
if(x > y){
```

```
    alert("Greater than worked!")
```

```
}
```



Greater/Less Than and Equal To $\leq$ $\geq$

Same rules apply as Greater Than or Less Than but a = symbol is used for each and it evaluates if the values are equal



If...Else if.....else?

```
if (condition1) {
```

```
    //This will execute if condition is true
```

```
} else if (condition2) {
```

```
    //This will execute if condition 1 is false and condition 2 is true
```

```
} else {
```

```
    ///This will execute if condition1 is false and condition 2 is false
```

```
}
```



Lets try it

```
var x = 4;  
if (x == 3) {  
    alert("Condition 1 true");  
} else if (x == 2) {  
    alert("Condition 2 true");  
} else {  
    alert("Im the catch all!");  
}
```



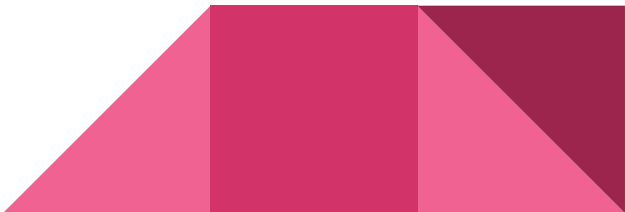
And

And lets you compare 2 conditions in an if statement

Both conditions must be true

```
If ( x ==4 && y ==3){
```

```
}
```



Lets try it

```
var x = 4;
```

```
var y = 3;
```

```
If ( x ==4 && y ==3){  
    alert("made it!");  
}
```



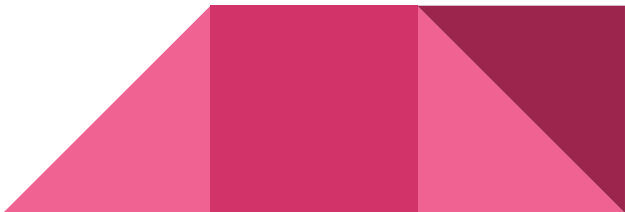
OR

OR lets you compare 2 conditions in an if statement

At least one of the conditions must be true

```
If ( x ==4 || y ==3){
```

```
}
```



Lets try it

```
var x = 4;
```

```
var y = 3;
```

```
If ( x ==4 || y ==3){
```

```
    alert("made it!");
```

```
}
```

