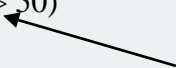# If (Condition)

if, tests whether a certain condition has been reached, such as an input being above a certain number.

```
if (someVariable > 50)
{
  // do something here
}
```

Comparison Operator

Comparison Operators:

```
x == y (x is equal to y)
x != y (x is not equal to y)
x <  y (x is less than y)
x >  y (x is greater than y)
x <= y (x is less than or equal to y)
x >= y (x is greater than or equal to y)
```

Examples:

```
if (x > 120) digitalWrite(LEDpin, HIGH);


if (x > 120){
  digitalWrite(LEDpin1, HIGH);
  digitalWrite(LEDpin2, HIGH);
}


if (x ==1 || x==3)
  digitalWrite(LEDpin, HIGH);
```

Common Boolean Operators:

|| (logical or) True if either operand is true

```
if (x > 0 || y > 0) {
// Your Code}
```

&& (logical and) true only if both inputs are high

```
// read two switches
if (digitalRead(2) == HIGH  && digitalRead(3) == HIGH)
{
// Your Code
}
```