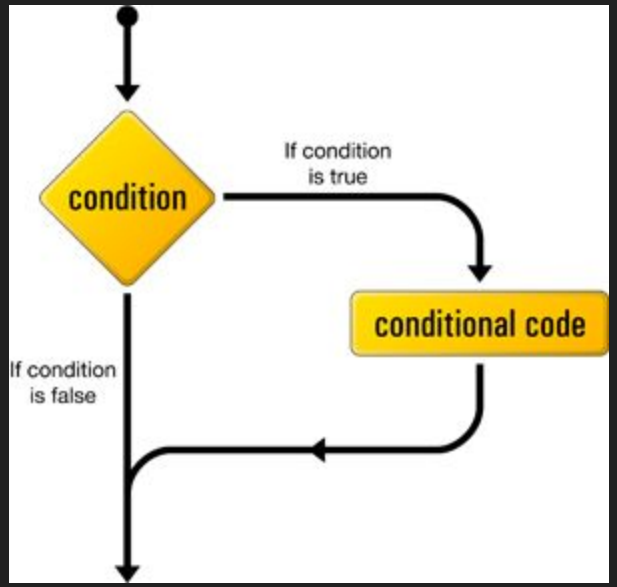
JavaScript

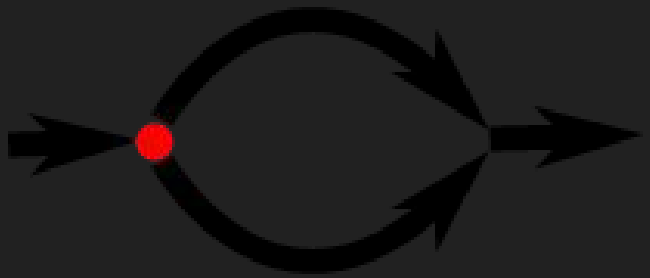
Part 2

Conditional Execution



Conditional Flow

```
if (theNumber < 10) {
    console.log("Small");
} else if (theNumber < 100) {
    console.log("Small");
} else {
    console.log("Large");
}
```



```
var num = 0;
while (num < 12) {
    console.log(num);
    num = num + 2;
}
```

```
for(var num = 0; num <= 12; num = num + 2) {
    console.log(num);
}
```

```
for(var num = 0; num <= 12; num += 2) {
    console.log(num);
}
```

Capitalization

- coolNewVariable
- coolnewvariable
- cool_new_variable
- CoolNewVariable

Challenge #1

Write a loop that makes seven calls to console.log to output the following triangle:

```
#
##
###
####
#####
######
#######
```

Challenge #2

Write a program that uses console.log to print all the numbers from 1 to 100, with two exceptions. For numbers divisible by 3, print "Fizz" instead of the number, and for numbers divisible by 5 (and not 3), print "Buzz" instead.

When you have that working, modify your program to print "FizzBuzz", for numbers that are divisible by both 3 and 5 (and still print "Fizz" or "Buzz" for numbers divisible by only one of those).

Functions

- alert

- What is the function of a function?

Defining functions

```
var square = function(x) {
    return x * x;
}
```

Exercise #1

- Write a power function that receives as arguments the base and the exponent and return base^exponent.

```
var power = function(base, exponent) {
    var result = 1;
    for(var count = 0; count < exponent; count++) {
        result *= base;
    }
    return result;
};
```

```
function power2(base, exponent) {
    var result = 1;
    for(var count = 0; count < exponent; count++) {
        result *= base;
    }
    return result;
}
```

Recursion

```
function power3(base, exponent) {
    if(exponent === 0) {
        return 1;
    }
    else {
        return base * power3(base, exponent-1);
    }
}
```

Exercise #2

- Write a function that returns the min value between two numbers.

Training Program: https://www.freecodecamp.com

Day 1: Write Reusable JavaScript with Functions up to Understanding Boolean

Day 2: If Statements up to Golf Code

Day 3: Switch Statements up to Counting Cards