

Arrays, Expressions and Loops!

Over and Over again!

Arrays



An array is an object that can store multiple values at once. Arrays are defined by having values between square brackets `[]`, separated by commas.

Ex.

```
let ourArr = ["one", "two", "three"]
```

Zero Index

Zero-based numbering is a way of numbering in which the initial element of a sequence is assigned the index 0, rather than the index 1.



Accessing data via index



Items in collections can be accessed via their index.

```
let x = ["one", "two", "three"]
```

```
console.log(x[1])
```

```
two
```

Assignment Operators

Addition +=

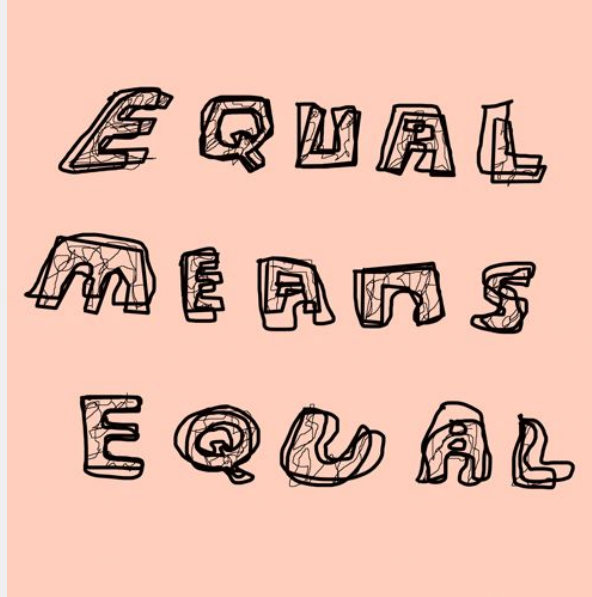
Subtraction -=

Multiplication *=

Division /=

Modulus %=

Exponent **=



Logical Operators

AND

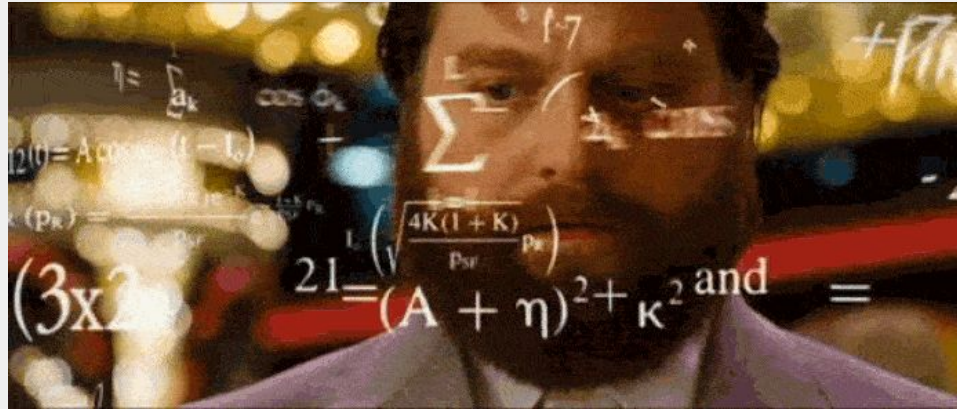
OR

NOT

&&

||

!



Conditional Execution

IF something is true do something

ELSE IF something else is true do something else

ELSE(if nothing above this was true) do something



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But wait, there's more

We've got another option! let's talk about switch/case statements

```
switch(expression) {  
    case x:  
        // code block  
        break;  
    case y:  
        // code block  
        break;  
    default:  
        // code block  
}
```


What are loops?

Loops!

- Used to run a set of instructions multiples times.
- There are different types of loops
 - For loop
 - While loop
- Loops run for as long as a scenario you specify is true



While Loops

While Loop

- Execute code for as long as a scenario you specify is true
- While loops can create infinite loops.
- The “continue” and “break” keywords give you additional control of while loops.



Do While Loop

- Same as while loop but executes loop AT LEAST once



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While Loops - When to use them?

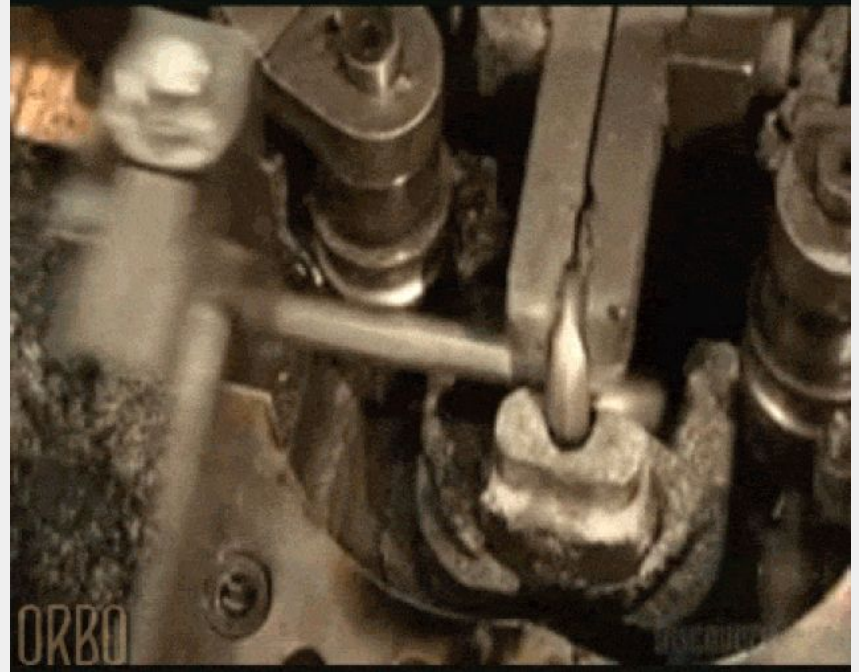
While loops are best used when you aren't sure how many iterations of the loop need to take place.



For Loops

For Loop

- a control flow statement for specifying iteration, which allows code to be executed repeatedly



For Loops - When to use them?

For loops are best used when you know how many iterations of the loop need to take place. They are also best used when iterating over an object.

