DATA TYPES & LOOPS

VARIABLES

Declaring a variable:	`let age;`
Assigning a variable:	`age = 29;`
Both in one step:	`let age = 29;`

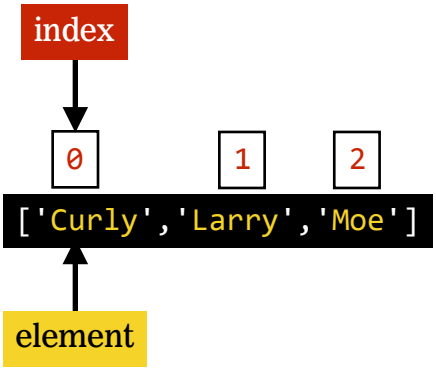
EQUAL SIGNS

`=`	*assigns value on right to object on left*
`===`	*evaluates whether values on left and right are the same*

DATA TYPES

String	Literal characters, enclosed in quotes `"about"`
Number	Numbers treated as numeric values (not in quotes) `15`
Array	Collection of data `["Larry","Curly",15,42]`

ARRAYS



ARITHMETIC OPERATORS

`+`	*add (also concatenates strings)*
`-`	*subtract*
`*`	*multiply*
`/`	*divide*
`%`	*modulus (remainder)*

SPECIAL NUMBER OPERATORS

`Math.pow(m,n)`	*Returns m to the power of n*
`Math.sqrt(n)`	*Returns the square root of n*
`Math.random()`	*Returns a random number between 0 (inclusive) and 1 (exclusive)*
`Math.floor(n)`	*Returns largest integer less than or equal to n*
`Math.ceil(n)`	*Returns smallest integer greater than or equal to n*

COMPOUND OPERATORS

`+=`	*adds a number to a variable and assigns the new value to the same variable*
`-=`	*subtracts a number from a variable and assigns the new value to the same variable*
`++`	*adds 1 to a value*
`--`	*subtracts 1 from a value*

ARRAY HELPER METHODS

`toString()`	*Returns a single string consisting of the array elements converted to strings and separated by commas*
`join()`	*Same as `toString()`, but allows you to pass a custom separator as an argument*
`pop()`	*Removes and returns the item at the end of the array*
`push()`	*Adds one or more items to the end of the array*
`reverse()`	*Reverses the array*
`shift()`	*Removes and returns the item at the start of the array*
`unshift()`	*Adds one or more items to the start of the array*

ARRAY ITERATOR METHODS

`forEach()`	*Executes a provided function once per array element*
`every()`	*Tests whether all elements in the array pass the test implemented by the provided function*
`some()`	*Tests whether some element in the array passes the text implemented by the provided function*
`filter()`	*Creates a new array with all elements that pass the test implemented by the provided function*
`map()`	*Creates a new array with the results of calling a provided function on every element in this array*

Usage:

```
arrayName.method(function() {
  // do something
});
```

Example:

```
let friends = ['Curly','Larry','Moe'];

friends.forEach(function() {
  // do something
});
```

LOOPS

for	*Runs while a condition is true, and includes syntax to declare and customize the iterator at the start*	`for (variable; condition; iteration) { // do something }`
while	*Runs while a condition is true*	`while (condition) { // do something }`
do while	*Runs while a condition is true, and ensures that the code block is executed at least once*	`do { // do something } while (condition)`