JS JavaScript Tutorials-Arrays

What is an Array?

An array is a method of storing multiple different values inside one variable, it is easy to think of an array as a list. You can store anything you want in your list but below is an array created to store names of different programming languages. These values are simply printed like we have printed variables before.

```
File ▼
                                       HTML
                                              CSS
                                                    JavaScript
          Add library
                     Share
                                                                       Output
HTML +
                                                                 Output
<!DOCTYPE html>
                                                                 JavaScript, Scratch, Python
<html>
<head>
  <meta charset="utf-8">
  <title>JS Bin</title>
<body>
<script>
var languages = ["JavaScript", "Scratch", "Python"];
document.getElementById("print").innerHTML = languages;
</script>
</body>
</html>
```

It is important to note the square brackets "[]". These are what tell JavaScript that they are an array.

What if we want to only print certain values of the array? We can do so like so, using square brackets after the variable name and the number of the value in the list or array. As seen below.

```
HTML
                                              CSS
    File ▼
          Add library
                     Share
                                                    JavaScript
                                                              Console
                                                                       Output
HTML +
                                                                 Output
<!DOCTYPE html>
                                                                 Scratch
<html>
<head>
  <meta charset="utf-8">
  <title>JS Bin</title>
</head>
<body>
var languages = ["JavaScript", "Scratch", "Python"];
document.getElementById("print").innerHTML = languages[1];
</script>
</body>
</html>
```



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As you can see doing this will print "Scratch". You may be asking yourself, "Scratch isn't the first item in the list?!?!" And you would be right to think so. However, using arrays counts the first value as "0". See a clearer explanation below!

```
var languages = ["JavaScript", "Scratch", "Python"];
```

From this explanation we can see that the 0th value in the list is "JavaScript", the 1st value is "Scratch" and the 2nd value is "Python".

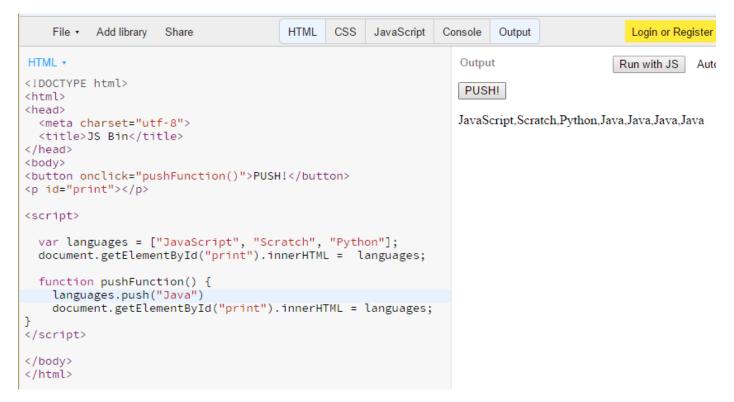
We can see how many items there are in our array by using the ".length" property. For example:

```
CSS
           Add library
                                        HTML
                                                     JavaScript
                                                                        Output
    File ▼
                     Share
                                                               Console
HTML +
                                                                  Output
<!DOCTYPE html>
                                                                  There are 3 items in the list
<html>
<head>
  <meta charset="utf-8">
  <title>JS Bin</title>
</head>
<body>
<script>
var languages = ["JavaScript", "Scratch", "Python"];
document.getElementById("print").innerHTML = "There are " +
languages.length + " items in the list";
</script>
</body>
</html>
```



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An easy way to add items to our array is a method called push. You can think of it as pushing an item onto the list. Below we have created a button that calls the "pushFunction" function. This function is used to add the value "Java" onto our array list and then tells the browser to reprint the array values.



TRY THIS!!!!

Get a user input and push that value onto the array!