JavaScript (JS)

Loop Shorthand

```javascript
for (var counter = 0; counter < 10; counter = counter + 1) {
    console.log(counter);
}


for (var i = 0; i < 10; i += 1) {
    console.log(i);
}


for (var i = 0; i < 10; i++) {
    console.log(i);
}
```

```
i = i + 1
i = i - 1


i += 1
i -= 1


i++
i--
```

While Loops

```javascript
for (var i = 0; i < 10; i += 1) {
    console.log(i);
}
```

```javascript
var i = 0;
while (i < 10) {
    console.log(i);
    i += 1;
}
```

Arrays

data && data

Creating an Array

```
var scoreArray = [50, 30, 100, 84, 20, 100];
```

```javascript
var greetingsArray = ["hey", "howdy", "sup", "yo", "hola"];
```

```
var grades = ["A", 98, 50, 24, "C", "D", 25, "B"];
```

Position (Index) of Elements

```
var scoreArray = [50, 30, 100, 84, 20, 100];
```

0   1   2   3   4   5

Getting Elements from an Array

```
var scoreArray = [50, 30, 100, 84, 20, 100];
```

INDEX

scoreArray[0]

ARRAY NAME

```javascript
var scoreArray = [50, 30, 100, 84, 20, 100];
```

```javascript
console.log(scoreArray[0]);
console.log(scoreArray[2]);
console.log(scoreArray[5]);
```

Getting the Last Element from an Array

```javascript
var scoreArray = [50, 30, 100, 84, 20, 100];

var length = scoreArray.length;
console.log(length);
```

```
var scoreArray = [50, 30, 100, 84, 20, 100];


var length = scoreArray.length;
console.log(length);
```

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```javascript
var scoreArray = [50, 30, 100, 84, 20, 100];

var length = scoreArray.length;
console.log(length);

var lastElement = scoreArray[length - 1];
```

Modifying Elements

```
var scoreArray = [50, 30, 100, 84, 20, 100];

// Adjusting the score on the first test
scoreArray[0] = 75;

// Adjusting the score on the second test
scoreArray[1] += 25;

// scoreArray is now [75, 55, 100, 84, 20, 100]
```

Adding Elements

```javascript
var scoreArray = [50, 30, 100, 84, 20, 100];

// Add a single score to the end of the array
scoreArray.push(89);

// scoreArray is now:
//  [50, 30, 100, 84, 20, 100, 89]
```

```javascript
var scoreArray = [50, 30, 100, 84, 20, 100];
```

```javascript
// Add a series of scores to the end of the array
scoreArray.push(77, 67, 35);

// scoreArray is now:
//  [50, 30, 100, 84, 20, 100, 77, 67, 35]
```

Looping through an Array

```javascript
var scoreArray = [50, 30, 100, 84, 20, 100];

for (var i = 0; i < scoreArray.length; i += 1) {
    var score = scoreArray[i];
    console.log(score);
}
```