

For Loops

Another type of loop!

Objectives

- Understand the purpose of *for loops*
- Write valid *for loops*
- Compare and contrast *while loops* and *for loops*

For Loops

Another way of repeating code

```
for(init; condition; step) {  
    //run some code  
}
```

It looks weird, I know. Let's take a look at an example.

For Loops

Printing numbers from 1-5 with a for loop

```
for(var count = 0; count < 6; count++) {  
  console.log(count);  
}
```

Printing numbers from 1-5 with a while loop

```
var count = 1;  
  
while(count < 6) {  
  console.log("count is: " + count);  
  count++;  
}
```

For Loops

Printing each character in a string with a for loop

```
var str = "hello";  
  
for(var i = 0; i < str.length; i++){  
    console.log(str[i]);  
}
```

And with a while loop

```
var str = "hello";  
var count = 0;  
  
while(count < str.length) {  
    console.log(str[count]);  
    count++;  
}
```

For Loops

Exercise 1

```
for(var i = 0; i < 16; i+=8){  
    console.log(i);  
}
```

For Loops

Exercise 2

```
var str = "ahceclwlxo";  
  
for(var i = 1; i < str.length; i+=2){  
    console.log(str[i]);  
}
```