

Lesson 3

arrays, for loops, and persistence

Quiz show

Arrays

```
HIGH_SCORE = 123
```

```
HIGH_SCORES = [ 50, 40, 30, 20, 10 ]
```



```
HIGH_SCORES = [ 30, 20, 10 ]
```



```
HIGH_SCORES = [ 30, 25, 20 ]
```

```
HIGH_SCORES[0]
```

```
HIGH_SCORES[1]
```

```
HIGH_SCORES[2]
```



The diagram consists of three white arrows pointing from the indices of the array to their corresponding values. The first arrow starts at the '0' in 'HIGH_SCORES[0]' and points to the '30' in the list. The second arrow starts at the '1' in 'HIGH_SCORES[1]' and points to the '25' in the list. The third arrow starts at the '2' in 'HIGH_SCORES[2]' and points to the '20' in the list.

```
HIGH_SCORES.length = ?
```



```
context.fillText(HIGH_SCORES[0], x, y)
```



```
HIGH_SCORES = []
```



```
HIGH_SCORES = [ 30, 20, 10 ]
```

```
HIGH_SCORES.push(25)
```

```
[ 30, 20, 10, 25 ]
```

```
HIGH_SCORES.sort(REVERSE_NUMERICAL)
```

```
[ 30, 25, 20, 10 ]
```

```
HIGH_SCORES.pop()
```

```
[ 30, 25, 20 ]
```



```
if (SCORE > HIGH_SCORE) {  
    . . .  
}
```


Loops

What if we want to do something for each element in an array?

```
context.fillText(HIGH_SCORES[0], x, y)
context.fillText(HIGH_SCORES[1], x, y)
context.fillText(HIGH_SCORES[2], x, y)
context.fillText(HIGH_SCORES[3], x, y)
context.fillText(HIGH_SCORES[4], x, y)
```


Loops

```
for (i=0; i<3; i++) {  
    }  
}
```

set a variable



keep going if this is true

what to do after each loop

Loops

```
for (i=0; i<3; i++) {  
    console.log(i)  
}
```

How many times does the loop run?

What numbers does it print out?

loadScores()
saveScores()