

## 4 – Arrays & Loops

### 1. WEB CART ARRAY

- Create an empty array for a shopping cart.

### 2. GROCERY CHECKOUT

- Create an array of 5 grocery items.
- Create a new array of prices for the above items.
- Output the FIRST item from both arrays to your browser's JavaScript console.
- Output the LAST item from both arrays to your browser's JavaScript console.

### 3. MP3 PLAYLIST

- Create an empty array for a music playlist.
- Use the JavaScript function `push()` to add 5 song titles to the end of your playlist.
- Output the whole array to the console - no loop needed.
- Using the `length` property, display the number of items in your playlist on the console.
- Ready to listen? Now, use `shift()` to remove the first song from your playlist and output the title to the console.
- Output the remaining array (now, four items) to the console.

### 4. COUNT TO 10

- Use a *for* loop to count from 0 - 10 in the console.

### 5. COUNTDOWN

- Use a *for* loop to count down from 10 to 0.

### 6. COUNT TO 100

- Use a *for* loop to count from 0 - 100 by twenty in the console. (0, 20, 40...)

### 7. COLOUR PALLETTE

- Create an empty array to hold colours.
- Create a loop that asks users to add a colour 4 times. Don't worry about validating input.
- Within the loop, add the new colour to the end of the array using the *push()* method.
- After the loop has completed, use another loop to output the colours to the console. Once you have that working, try using the `length` property of the array as the running condition for the second loop.

## 8. ARE YOU SURE?

- Declare a variable and initialize it to false. This is known as a “flag” variable.
- Create a *while* loop that will keep asking the user, "Are you sure?" with a popup box that requires a yes or no answer.
- Use an *if* statement to check if the user input returned *true* (they clicked OK).
- If the user clicked OK, a popup will say, "Oh, good.", and the 'flag' variable needs to be set to true to end the while loop.
- If the user clicks anything but ok, the loop will continue to ask them.

My answers are below...

===== ANSWERS =====

1.

```
var cartItems = [];
```

2.

```
var groceryCart = ["Milk", "Bread", "Lemons", "Yogurt", "Pie"];  
var itemPrices = [3.99, 2.85, 4.50, 5.99, 7.99];  
console.log(groceryCart[0]);  
console.log(itemPrices[0]);  
console.log(groceryCart[4]);  
console.log(itemPrices[4]);
```

3.

```
var myTunes = [];  
myTunes.push("At the Hop");  
myTunes.push("Penny Lane");  
myTunes.push("Disco Inferno");  
myTunes.push("The Reflex");  
myTunes.push("Wonderwall");  
console.log(myTunes);  
console.log(myTunes.length);  
var nextSong = myTunes.shift();  
console.log(nextSong);  
console.log(myTunes);
```

4.

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

5.

```
for(var i = 10; i >= 0; i = i - 1){  
    console.log(i);  
}
```

6.

```
for(var i = 0; i <= 100; i = i + 20){  
    console.log(i);  
}
```

7.

```
var myPalette = [];  
for(var i = 0; i <= 3; i = i + 1){  
    var getColour = prompt("Add a colour");  
    myPalette.push(getColour);  
}  
  
for(var j = 0; j < myPalette.length; j = j + 1){  
    console.log(myPalette[j]);  
}
```

8.

```
var checkFlag = false;
while(checkFlag === false){
    var askUser = confirm("Are you sure?");
    if(askUser === true){
        alert("Oh, good.");
        checkFlag = true;
    }
}
```