

1.**Get 1 to 255** - Write a function that returns an array with all the numbers from 1 to 255.

```
function integers(){
    var arr=[];
    for(var i=1; i<=255; i++){
        arr.push(i);
    }
    return arr;
}
```

1.**Get even 1000** - Write a function that would get the sum of all the even numbers from 1 to 1000. You may use a modulus operator for this exercise.

```
function even(){
    var sum = 0;
    for(var i=1; i<=1000; i++){
        if(i % 2 === 0){
            sum += i;
        }
    }
    return sum;
}
even();
```

1.**Sum odd 5000** - Write a function that returns the sum of all the odd numbers from 1 to 5000. (e.g. 1+3+5+...+4997+4999).

```
function odd(){
    var sum = 0;
    for(var i=1; i<=5000; i++){
        if(i % 2 !== 0){
            sum += i;
        }
    }
    return sum;
}
odd();
```

1.**Iterate an array** - Write a function that returns the sum of all the values within an array. (e.g. [1,2,5] returns 8. [-5,2,5,12] returns 14).

```
function sumarr(arr){
    var sum = 0;
    for(var i=0; i<arr.length; i++){
        sum = sum + arr[i];
    }
    return sum;
}
```

1. **Find max** - Given an array with multiple values, write a function that returns the maximum number in the array. (e.g. for [-3,3,5,7] max is 7)

```
function findmax(arr){
    var max = 0;
    for(var i=0; i<arr.length; i++){
        if(max < arr[i]){
            max = arr[i]
        }
    }
    return max;
}
```

1. **Find average** - Given an array with multiple values, write a function that returns the average of the values in the array. (e.g. for [1,3,5,7,20] average is 7.2)

```
function findmax(arr){
    var sum = 0;
    var avg = 0;
    for(var i=0; i<arr.length; i++){
        sum = sum + arr[i];
    }
    avg = sum / arr.length;
    return avg;
}
```

Array odd - Write a function that would return an array of all the odd numbers between 1 to 50. (ex. [1,3,5, ..., 47,49]). Hint: Use 'push' method

```
function odd(){
    var arr = [];
    for(var i=0; i<=50; i++){
        if(i % 2 != 0){
            arr.push(i);
        }
    }
    return arr;
}
```

Greater than Y - Given value of Y, write a function that takes an array and returns the number of values that are greater than Y. For example if arr = [1, 3, 5, 7] and Y = 3, your function will return 2. (There are two values in the array greater than 3, which are 5, 7).

```
function greaterthan(arr, Y){
    var counter = 0;
    for(var i=0; i< arr.length; i++){
        if(arr[i] > Y){
            counter = counter + 1
        }
    }
}
```

1.Squares - Given an array with multiple values, write a function that replaces each value in the array with the value squared by itself. (e.g. [1,5,10,-2] will become [1,25,100,4])

```
function square(arr){
    for(var i=0; i< arr.length; i++){
        arr[i] = arr[i] * arr[i];
    }
    return arr;
}
```

1.Negatives - Given an array with multiple values, write a function that replaces any negative numbers within the array with the value of 0. When the program is done the array should contain no negative values. (e.g. [1,5,10,-2] will become [1,5,10,0])

```
function zero(arr){
    for(var i=0; i< arr.length; i++){
        if(arr[i] < 0){
            arr[i] = 0
        }
    }
    return arr;
}
```

1.Max/Min/Avg - Given an array with multiple values, write a function that returns a new array that only contains the maximum, minimum, and average values of the original array. (e.g. [1,5,10,-2] will return [10,-2,3.5])

```
function stuff(arr){
    var max = 0;
    var min = 0;
    var sum = 0;
    var avg = 0;
    var arrnew = [];
    for(var i=0; i< arr.length; i++){
        if(max < arr[i]){
            max = arr[i]
        }
        else if(min > arr[i]){
            min = arr[i]
        }
        sum = sum + arr[i];
        avg = sum / arr.length;
        arrnew = [max, min, avg];
    }
    return arrnew;
}
```

1.Swap Values - Write a function that will swap the first and last values of any given array. The default minimum length of the array is 2. (e.g. [1,5,10,-2] will become [-2,5,10,1]).

```
<script type="text/javascript">
function stuff(arr){
    var temp = arr[0];
    arr[0] = arr[arr.length - 1];
    arr[arr.length - 1] = temp;
    return arr;
}
```

1.Number to String - Write a function that takes an array of numbers and replaces any negative values within the array with the string 'Dojo'. For example if array = [-1,-3,2], your function will return ['Dojo','Dojo',2].

```
function stringstuff(arr){
    for(var i = 0; i < arr.length; i++){
        if(arr[i] < 0){
            arr[i] = "Dojo";
        }
    }
    return arr;
}
```