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

function get\_array() {

var arr = [ ];

//your code here

for (var i = 1; i <256; 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 sum\_even\_numbers(){

var sum = 0;

//your code here

for (var i = 1; i < 1001; i++){

if (i % 2 ===0){

sum += i;

}

}

return sum;

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 sum\_odd\_5000() {

var sum = 0;

//your code here

for (var i = 0; i <= 5000; i++){

if (i % 2 == 1){

sum = sum + i;

}

}

return sum;

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 iterArr(arr) {

var sum = 0;

for (var i=0; i <arr.length; i++){

if(i<arr.length){

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) {

//your code here

var max = arr[0];

for (var i = 1; 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 findAvg(arr) {

//your code here

var sum = 0;

for (var i = 0; i < arr.length; i++) {

if(i <arr.length) {

sum = sum + arr[i]

}

}

return sum / arr.length;

}

1. **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 oddNumbers() {

var arr = [];

//your code here

for (var i = 0; i < 50; i++) {

if (i % 2 === 1) {

arr.push(i);

}

}

return arr;

}

1. **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 greaterY(arr, Y) {

//your code here

var count = 0;

for (var i = 0; i < arr.length; i++){

if (arr[i] > Y) {

count++;

}

}

return count;

}

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 squareVal(arr) {

//your code here

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 noNeg(arr) {

//your code here

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 maxMinAvg(arr) {

//your code here

var min = arr[0];

var max = arr[0];

var sum = arr[0];

for (var i = 1; i < arr.length; i++) {

if (arr[i] < min) {

min = arr[i];

}

if (arr[i] > max) {

max = arr[i];

}

sum = sum + arr[i];

}

var avg = sum / arr.length;

var 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]).

function swap(arr) {

//your code here

var temp = arr[0];

arr[0] = arr[arr.length-1];

arr[arr.length-1] = temp;

return arr;

}

1. 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 numToStr(arr) {

//your code here

for (var i = 0; i < arr.length; i++) {

if (arr[i] < 0) {

arr[i] = 'Dojo';

}

}

return arr;

}