**Arrays and Cycles Practical Task**

1. Given an array consisting of movie names, iterate over the array with the output of the names of each movie to the console

const arr = ["Frozen","XXX","Nemo","Avatar","Matrix"];

arr.forEach (name => console.log (name));

//

Frozen

XXX

Nemo

Avatar

Matrix

**Or**

array = ["Frozen","XXX","Nemo","Avatar","Matrix"];

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

    console.log(array[i]);

}

1. Given an array of car manufacturers, convert the array to a string and back to an array

const arr = ["Ford", "BMW", "Reno", "Skoda", "KIA"]

const string = arr.toString();

console.log(string);

const arrAg = string.split(',');

console.log(arrAg);

//

Ford,BMW,Reno,Skoda,KIA

[ 'Ford', 'BMW', 'Reno', 'Skoda', 'KIA' ]

3. Given an array of the names of your friends, add the words hello to each element of the array

let arr = ["Masha", "Bill", "Alice", "Tanya", "Vova"]

arr = arr.map(i => 'Hello, ' + i);

console.log (arr);

//

[

'Hello, Masha',

'Hello, Bill',

'Hello, Alice',

'Hello, Tanya',

'Hello, Vova'

]

1. Convert numeric array to Boolean

let arr = [0, 1, 8, 10]

console.log (Boolean (arr));

**OR**

let arr = [0, 1, 8, 10]

console.log (!!arr);

// true

1. Sort the array [1,6,7,8,3,4,5,6] in descending order

const arr = [1,6,7,8,3,4,5,6];

arr.sort();

console.log (arr.reverse());

//

[ 8, 7, 6, 6, 5, 4, 3, 1]

**OR**

const points = [1,6,7,8,3,4,5,6];

points.sort(function(a, b){return b-a});

console.log (points);

1. Filter array [1,6,7,8,3,4,5,6] by value> 3

let arr = [1,6,7,8,3,4,5,6]

let result = arr.filter (item=>item>3);

console.log (result);

//

[ 6, 7, 8, 4, 5, 6 ]

1. Write a function that takes two parameters - an array and a number and outputs the index of an array element equal to a number

let arr = [10,11,12,13,14,15]

function findIndex(arr, number) {

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

        if (arr[i] === number) {

            return i;

        }

    }

    return -1;

}

console.log (findIndex (arr, 17)); //-1

console.log (findIndex (arr, 10)); //0

console.log (findIndex (arr, 13)); //3

1. ﻿Implement a loop that will print the number 'a' until it is less than 10

let a = 0;

while (a < 10) {

  console.log(a);

  a++;

}

1. Implement a loop that prints prime numbers to the console

let n = 100;

nextPrime:

for (let i = 2; i <= n; i++) {

  for (let j = 2; j < i; j++) {

    if (i % j == 0) continue nextPrime;

  }

  console.log( i );

}

1. Implement a loop that prints odd numbers to the console

let n = 10;

for (let i = 0; i <= n; i++) {

      if (i % 2 == 0) continue;

      console.log( i );

  }