# Lab: Arrays and Matrices

## 1.Sum First Last

function solve() {

let arrayInput = JSON.parse(document.getElementById("arr").value);

let resultElement = document.getElementById('result');

calculate(arrayInput);

function calculate(array){

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

let p = document.createElement('p');

p.textContent = `${i} -> ${array[i] \* array.length}`;

resultElement.appendChild(p);

}

}

}

## 2.Even Position Element

function solve() {

let inputArray = JSON.parse(document.getElementById('arr').value);

let result = [];

calculate();

document.getElementById('result').innerHTML = result.join(' x ');

function calculate(){

inputArray.forEach((element, index) => {

if (index % 2 === 0){

result.push(element);

}

});

}

}

## 3.Replace and Reverse

function solve() {

let inputArray = JSON.parse(document.getElementById('arr').value);

let result = reverseAndMakeFirstLetterUpper(inputArray);

document.getElementById('result').innerHTML = result;

function reverseAndMakeFirstLetterUpper(inputArray){

inputArray.forEach((element, index) => {

element = element.split('').reverse().join('');

inputArray[index] = element.charAt(0).toUpperCase().concat(element.slice(1));

});

return inputArray.join(' ');

}

}

## 4.Find element

function solve() {

let number = Number(document.getElementById('num').value);

let inputArray = JSON.parse(document.getElementById('arr').value);

let answer = findIfSearchedExist(number, inputArray);

document.getElementById('result').innerHTML = answer;

function findIfSearchedExist(searched, input){

let result = [];

for(let element of input){

let isSearchedExist = element.includes(searched);

let index = element.indexOf(searched);

result.push(isSearchedExist + ' -> ' + index);

}

return result;

}

}

## 5.Multiple sort

function solve() {

let inputArray = JSON.parse(document.getElementById('arr').value);

sortAscendingAndAlphabetically(inputArray);

function sortAscendingAndAlphabetically(input){

let resultElement = document.getElementById('result');

let sortedAscending = input.sort((a, b) => a - b);

let div1 = document.createElement('div');

div1.textContent = sortedAscending.join(', ');

resultElement.appendChild(div1);

let sortedAlphabetically = input.sort((a, b) => a.localeCompare(b));

//let sortedAlphabetically = input.sort();

let div2 = document.createElement('div');

div2.textContent = sortedAlphabetically.join(', ');

resultElement.appendChild(div2);

}

}