**Programs in anonymous function & IIFE**

1. **Print odd numbers in an array**

const readline = require("readline");

const inp = readline.createInterface({

input: process.stdin

});

const userInput = [];

inp.on("line", (data) => {

userInput.push(data);

});

inp.on("close", () => {

let arr1=userInput;

let arr2=[];

(function (){for(let x=0;x<arr1.length;x++){

if(arr1[x]%2!==0){

arr2.push(arr1[x]);

}

}

})();

console.log(arr2);

});

1. **Convert all the strings to title caps in a string array**

const readline = require("readline");

const inp = readline.createInterface({

input: process.stdin

});

const userInput = [];

inp.on("line", (data) => {

userInput.push(data);

});

inp.on("close", () => {

let small=userInput;

(function (){

let caps = small[0].toUpperCase();

console.log(caps);

})();

});

1. Sum of all numbers in an array

const readline = require("readline");

const inp = readline.createInterface({

input: process.stdin

});

const userInput = [];

inp.on("line", (data) => {

userInput.push(data);

});

inp.on("close", () => {

let arr1=[1,2,3,4];

var result=0;

(function (){

for(var i=0;i<arr1.length;i++){

result+=arr1[i];

}

console.log(result);

})();

});

**4.Return all the prime numbers in an array**

const readline = require("readline");

const inp = readline.createInterface({

input: process.stdin

});

const userInput = [];

inp.on("line", (data) => {

userInput.push(data);

});

inp.on("close", () => {

let arr1=userInput;

(function (){

let primecheck=true;

for(var i=0;i<arr1.length;i++){

primecheck=true;

if(arr1[i]>1){

for(var x=2;x<arr1[i];x++)

{

if(arr1[i]%x===0)

{

primecheck=false;

break;

}

}

if(primecheck)console.log(arr1[i]);

}

}

})();

});

**5.Return all the palindromes in an array**

const readline = require("readline");

const inp = readline.createInterface({

input: process.stdin

});

const userInput = [];

inp.on("line", (data) => {

userInput.push(data);

});

inp.on("close", () => {

var str = userInput;

for(var element = 0;element<str.length;element++){

(function (){

var temp = str[element];

for(var i=0;i<temp.length/2;i++){

if(temp[i]!==temp[temp.length-1-i])

return;

}

console.log(str[element]);

})();

}

});

1. **Return median of two sorted arrays of the same size**.

const readline = require("readline");

const inp = readline.createInterface({

input: process.stdin

});

const userInput = [];

inp.on("line", (data) => {

userInput.push(data);

});

inp.on("close", () => {

let ar1 = [ 1, 12, 15, 26, 38 ];

let ar2 = [ 2, 13, 17, 30, 45 ];

let n1 = 5;

let n2 = 5;

if (n1 == n2){

( function ()

{

let j = 0;

let i = n - 1;

while (ar1[i] > ar2[j] && j < n && i > -1)

{

let temp = ar1[i];

ar1[i] = ar2[j];

ar2[j] = temp;

i--; j++;

}

ar1.sort(function(a, b){return a - b});

ar2.sort(function(a, b){return a - b});

return parseInt((ar1[n - 1] + ar2[0]) / 2, 10);

console.log("Median is "+ getMedian(ar1, ar2, n1));

})();

}

else

console.log("Doesn't work for arrays of unequal size");

});

1. **Remove duplicates from an array**

const readline = require("readline");

const inp = readline.createInterface({

input: process.stdin

});

const userInput = [];

inp.on("line", (data) => {

userInput.push(data);

});

inp.on("close", () => {

var str = userInput;

(function (){

for(var i = 0;i<str.length/2;i++){

var temp = str[i];

for(var x=i;x<str.length;x++){

if(temp===str[x+1])

str.splice(x+1,1);

}

}

console.log(str);

})();

});

1. **Rotate an array by k times**

const readline = require("readline");

const inp = readline.createInterface({

input: process.stdin

});

const userInput = [];

inp.on("line", (data) => {

userInput.push(data);

});

inp.on("close", () => {

var nums = userInput;

var k = 5;

(function() {

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

nums.unshift(nums.pop());

}

console.log(nums);

})();

});