1. **Function & IIFE**
2. **Print odd numbers in an array**

function printOdd(arr){

const oddnumber= arr.filter(number=>number %2 !==0);

console.log(oddnumber);

}

const numbers=[1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17];

printOdd(numbers);

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

function toTitleCase(str) {

return str.replace(/\w\S\*/g, function(txt) {

return txt[0].toUpperCase() + txt.substr(1);

});

}

var arr = ["my country is india", "my state is tamilnadu"];

var newArr = arr.map(toTitleCase);

console.log(newArr);

**c) Sum of all numbers in an array**

(function () {

var numbers = [1, 2, 3, 4, 5];

var sum = numbers.reduce(function (a, b) {

return a + b;

}, 0);

console.log(sum);

})();

**d) Return all the prime numbers in an array**

var numArray = [2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24,]

numArray = numArray.filter((number) => {

for (var i = 2; i <= Math.sqrt(number); i++) {

if (number % i === 0) return false;

}

return true;

});

console.log(numArray);

**e) Remove duplicates from an array**

(function () {

var arr = [1, 2, 3, 1, 2, 4];

var actualArr = arr.filter(function (val1,val2) {

return arr.indexOf(val1) === val2;

});

console.log(actualArr);

})();

**f) Rotate an array by k times**

const arr = [1, 2, 3, 4, 5];

const k = 2;

const rotatedArray = (function (arr, k) {

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

arr.unshift(arr.pop());

}

return arr;

})(arr, k);

console.log(rotatedArray);

**2.Do the below programs in arrow functions.**

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

const arr = [1, 2, 3, 4, 5, 6, 7, 8, 9];

const oddNumbers = arr.filter(number => number % 2 !== 0);

console.log(oddNumbers);

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

const strings = ["hello world", "this is a sentence"];

const toTitleCase = (str) => {

const words = str.split(" ");

return words.map((word) => word[0].toUpperCase() + word.slice(1)).join(" ");

};

const titleCaseStrings = strings.map(toTitleCase);

console.log(titleCaseStrings);

**C.Sum of all numbers in an array**

const sumArray = (numbers) => {

let sum = 0;

for (const number of numbers) {

sum += number;

}

return sum;

};

const numbers = [1, 2, 3, 4, 5];

const total = sumArray(numbers);

console.log(total);

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

const numbers = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10];

const primeNumbers = numbers.filter(number => {

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

if (number % i === 0) {

return false;

}

}

return true;

});

console.log(primeNumbers);

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

const getAllPalindromes = (words) => {

return words.filter((word) => {

word.split("").reverse().join("") === word;

});

};

console.log(getAllPalindromes(["hello", "noon"]));