1. **Do the below programs in anonymous function & IIFE**
   1. **Print odd numbers in an array**

const oddNumberPrinter = function(arr) {

arr.forEach(function(num) {

if (num % 2 !== 0) {

console.log(num);

}

});

};

// Example usage

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

oddNumberPrinter(numbers);

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

const titleCapsConverter = (function(arr) {

return arr.map(function(str) {

return str.charAt(0).toUpperCase() + str.slice(1).toLowerCase();

});

})(["hello", "world", "example"]);

console.log(titleCapsConverter);

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

const sumArray = (function(arr) {

return arr.reduce(function(sum, num) {

return sum + num;

}, 0);

})([1, 2, 3, 4, 5]);

console.log(sumArray);

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

const primeNumberFinder = (function(arr) {

function isPrime(num) {

if (num <= 1) return false;

if (num <= 3) return true;

if (num % 2 === 0 || num % 3 === 0) return false;

let i = 5;

while (i \* i <= num) {

if (num % i === 0 || num % (i + 2) === 0) return false;

i += 6;

}

return true;

}

return arr.filter(function(num) {

return isPrime(num);

});

})([2, 3, 4, 5, 6, 7, 8, 9, 10]);

console.log(primeNumberFinder);

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

const palindromeFinder = (function(arr) {

function isPalindrome(str) {

return str === str.split('').reverse().join('');

}

return arr.filter(function(str) {

return isPalindrome(str);

});

})(["racecar", "hello", "level", "world"]);

console.log(palindromeFinder);

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

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

const printOddNumbers = arr => arr.forEach(num => { if (num % 2 !== 0) console.log(num); });

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

const convertToTitleCaps = arr => arr.map(str => str.charAt(0).toUpperCase() + str.slice(1).toLowerCase());

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

const sumArray = arr => arr.reduce((sum, num) => sum + num, 0);

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

const isPrime = num => {

if (num <= 1) return false;

if (num <= 3) return true;

if (num % 2 === 0 || num % 3 === 0) return false;

let i = 5;

while (i \* i <= num) {

if (num % i === 0 || num % (i + 2) === 0) return false;

i += 6;

}

return true;

};

const getPrimeNumbers = arr => arr.filter(num => isPrime(num));

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

const isPalindrome = str => str === str.split('').reverse().join('');

const getPalindromes = arr => arr.filter(str => isPalindrome(str));