1. Do the below program in anonymous function.

a. Print the odd numbers in an array.

let odd = function(arr){

let o = [];

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

{

if(arr[i]%2 != 0)

{

o.push(arr[i]);

}

}

return o;

};

console.log(odd([1,2,3,4]));

console.log(odd([22,45,78,29,8]));

**Output:**

[ 1, 3 ]

[ 45, 29 ]

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

let a = function(arr){

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

{

arr[i] = arr[i].charAt(0).toUpperCase() + arr[i].slice(1);

}

let ans= arr.join(" ");

let c = ans.split(" ");

return c;

};

console.log(a(['apple', 'banana', 'orange']));

##### Output:

[ 'Apple', 'Banana', 'Orange' ]

c. Sum of all numbers in an array.

let s = function(arr)

{

let sum = 0;

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

{

sum = sum + arr[i];

}

return sum;

};

console.log(s([7,8,10,2]));

console.log(s([1,3,5,7,9]));

##### Output:

27

25

d.Return all the prime numbers in an array.

let prime = function(arr)

{

let c = [];

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

{

let n = arr[i];

isPrime = true;

for(let j=2;j<n;j++)

{

if(n%j == 0)

{

isPrime = false;

break;

}

}

if(isPrime)

{

c.push(n);

}

}

return c;

};console.log(prime([3,6,7,9]));

##### Output:

[ 3, 7 ]

e. Return all the palindroms in an array.

let palin = function(arr) {

let c = [];

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

{

let arrayValues = arr[i].split('');

let reverseArrayValues = arrayValues.reverse();

let reverseString = reverseArrayValues.join('');

if(arr[i] == reverseString) {

c.push(arr[i]);

}}

return c;

};

console.log(palin(['madam','tiger','dog','radar']));

##### Output:

[ 'madam', 'radar' ]

f. Return median of two sorted arrays of same size.

let median1 = function(arr1,arr2){

let median = arr1.concat(arr2);

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

let mid = median.length /2;

let ans = (median[mid]+median[mid-1])/2;

return ans;

}

console.log(median1([5,10,6],[12,2,4]));

##### Output:

5.5

g. Remove duplicates from an array.

function getUnique(arr){

let uniqueArr = [];

for(let i of arr) {

if(uniqueArr.indexOf(i) === -1) {

uniqueArr.push(i);

}

}

return uniqueArr;

}

console.log(getUnique([2,4,5,2,3]));

##### Output:

[ 2, 4, 5, 3 ]

h. Rotate an array by k times.

let rotate = function(arr, numberOfShifts) {

let deletedArray = arr.splice(arr.length-numberOfShifts);

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

arr.splice(i,0,deletedArray[i]);

}

return arr;

};

console.log(rotate([2,3,4,5,6],2));

##### Output:

[ 5, 6, 2, 3, 4 ]

3. Do the below programs in arrow function.

a. print odd numbers in an array.

let odd = (arr) => {

let o = [];

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

{

if(arr[i]%2 != 0)

{

o.push(arr[i]);

}

}

return o;

};

let result = odd([1,2,3,4]);

console.log(result);

##### Output:

[ 1, 3 ]

b. convert all the strings to tile caps in a string array.

let a =(arr) => {

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

{

arr[i] = arr[i].charAt(0).toUpperCase() + arr[i].slice(1);

}

let ans= arr.join(" ");

let c = ans.split(" ");

return c;

};

let result = a(['apple', 'banana', 'orange']);

console.log(result);

##### Output:

[ 'Apple', 'Banana', 'Orange' ]

c. sum of all numbers in an array.

let s =(arr) => {

let sum = 0;

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

{

sum = sum + arr[i];

}

return sum;

};

let result = s([7,8,10,2]);

console.log(result);

##### Output:

27

d. Return all the prime numbers in an array.

let prime =(arr) => {

let c = [];

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

{

let n = arr[i];

isPrime = true;

for(let j=2;j<n;j++)

{

if(n%j == 0)

{

isPrime = false;

break;

}

}

if(isPrime)

{

c.push(n);

}

}

return c;

};

let result = prime([3,6,7,9]);

console.log(result);

##### Output:

[ 3, 7 ]

e. Return all the palindromes in an array.

let palin =(arr) => {

let c = [];

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

{

let arrayValues = arr[i].split('');

let reverseArrayValues = arrayValues.reverse();

let reverseString = reverseArrayValues.join('');

if(arr[i] == reverseString) {

c.push(arr[i]);

}}

return c;

};

let result = palin(['madam','tiger','dog','radar']);

console.log(result);

##### Output:

[ 'madam', 'radar' ]