1.Print odd numbers using anonymous function & IIFE Function

let a = function(array){

for(let i in array){

if(array[i]%2!=0){

console.log(array[i])

}

}

}

a ([1,2,3,4,5,6,7,8,9,10])

**Output**

1

3

5

7

9

**IIFE**

(function(array){

for( let i in array){

if(array[i]%2!=0){

console.log (array[i])

}

}

})([1,2,3,4,5,6,7,8,9,10])

**Output**

1

3

5

7

9

**Arrow Function**

oddNumbers = (array) => {

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

if(array[i]%2!=0){

console.log(array[i])

}

}

}

oddnumbers = ([1,2,4,5,6,7,8]);

**Output**

1

3

5

7

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

let a = function(array){

let x = 0;

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

X = x+array[i];

}

return sum;

}

a([1,2,3,4,5,6,7,8,9,10])

**Output**

55

**Ii)IIFE**

(function(array){

let x = 0

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

x= 0+ array[i]

}

return x;

})([1,2,3,4,5,6,7,8,9,10])

**Output**

55

**Arrow Function**

sum = (array)=>{

var sum = 0;

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

sum = sum + array[i];

}

return sum;

}

Sum([1,2,3,4,5,6,7,8,9,10])

1. **Return All Prime Numbers In an Array.**

**Anonymous Function:**

let a = function(numArray){

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

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

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

}

return true;

});

console.log(numArray);

}

a([1,2,3,4,5,6,7,8,9,10])

**Output**

[ 1, 2, 3, 5, 7 ]

**IIFE**

(function(numArray){

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

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

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

}

return true;

});

console.log(numArray);

})([1,2,3,4,5,6,7,8,9,10])

**Output**

[ 1, 2, 3, 5, 7 ]

**Arrow**

primeNumber = (numArray) => {

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

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

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

}

return true;

});

console.log(numArray);

}

primeNumber([1,2,3,4,5,6,7,8,9,10])

**Output**

[ 1, 2, 3, 5, 7 ]

**7.Remove duplicate from an array**

**Anonymous Function:**

let a =function(array){

let dup = [...new Set(array)];

console.log(dup);

}

a([1,1,2,2,3,4,5,6,7,8,9])

**Output**

[1,2,3,4,5,6,7,8,9]

**IIFE**

(function(array){

let dup = [...new Set(array)];

console.log(dup);

})([1,1,2,2,3,4,5,6,7,8,9])

**Output**

[1,2,3,4,5,6,7,8,9]

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

let a = function(array , k){

k = k % a.length;

if(k < 0){

k += a.length;

}

reverse (a, 0, a.length - k - 1);

reverse (a, a.length - k, a.length - 1);

reverse (a, 0, a.length - 1);

}

a([1,2,3,4] , 2)

**IIFE**

(function(array , k){

k = k % a.length;

if(k < 0){

k += a.length;

}

reverse(a, 0, a.length - k - 1);

reverse(a, a.length - k, a.length - 1);

reverse(a, 0, a.length - 1);

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