1. **Find Missing Number**

let arr = [1, 6,2, 3, 5];

let sort=arr.sort((a,b)=>a-b);

for(let i=1;i<arr.length;i++){

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

console.log("sort2",i)

}

}

console.log("sort",sort) // 4

**2 . find second Largest number**

let arr=[2,1,6,8,8,3,10];

let arr2=arr.filter((i,index)=>arr.indexOf(i)==index);

let sortArr=arr2.sort((a,b)=>a-b)

let secondLargestNo=sortArr[sortArr.length-2]

console.log("arr",secondLargestNo)//8

1. **Palindrome Number**

let str='madam'

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

if(str[i]==str[str.length-1-i]){

console.log('yes',str.length)

}

else{

console.log('no')

}

}

1. **Factorial number**

let no=5

if(no<0){

console.log('error');

}

else{

let fact=1;

for(let i=1;i<=no;i++){

console.log("i",i)

fact=fact\*i

}

console.log("fact",fact)// 120

}

1. **Check the Prime Number or Not**

let num = 8;

let value = checkPrime(num);

console.log('value', value);

function checkPrime(no) {

let isPrime = true;

if (no == 1) {

console.log('Not Prime nor composite number');

return false;

} else if (no > 1) {

for (let i = 2; i < no; i++) {

if (no % i == 0) {

isPrime = false;

break;

}

}

}

return isPrime;

}

1. **ArmStrong Number 153=1^3+5^3+3^3**

let no=153

let armstrongNumber=getNumber(no);

console.log("armstrongNumber",armstrongNumber)

function getNumber(num){

let sum=0

let temp=num;

while(temp>0){

let re=temp%10

sum=sum+re\*\*3

temp=parseInt(temp/10);

}

return sum;

**6 Remove duplicate value**

1. let number=[1,2,3,2,4,5,5,6]

let value=[...new Set(number)];

console.log('value',value);

let removeDub=number.filter((i,index)=>number.indexOf(i)==index);

console.log('value',removeDub);

1. **find max occurance of char and count**

let str = 'kirti';

let value = findOccurance(str);

console.log('value', value);

function findOccurance(str) {

const obj = {};

let maxCount = 0;

let maxChar = '';

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

let char = str[i];

if (obj[char]) {

obj[char]++;

} else {

obj[char] = 1;

}

if (obj[char] > maxCount) {

maxCount = obj[char];

maxChar = char;

}

}

return { maxChar, maxCount,obj };

//value { maxChar: 'i', maxCount: 2, obj: { k: 1, i: 2, r: 1, t: 1 } }

**7. flattenArray want into single array**

function flattenArray(arr){

let result=[]

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

if(Array.isArray(arr[i])){

let newArray=flattenArray(arr[i]);

result.push(...newArray);

}else{

result.push(arr[i]);

}

}

return result;

}

const originalArray = [1,[8,6], 2, 3, [[4, 8,[5]]], [6]];

const flattenedArray = flattenArray(originalArray);

console.log(flattenedArray);

// [ 1, 8, 6, 2, 3,4, 8, 5, 6]