**1. Hello World**

//Hello world

console.log("hello world");

function w(a){

    console.log(a);

}w("hello World")

**2. Add two Numbers**

//Add two numbers

var a=10

var b=20

console.log(a+b);

//add numbers in Function

function add(a,b){

    console.log(a+b);

}add(10,20)

**3. Find the Square root**

//Find the Square root

var a=9

console.log(Math.sqrt(a));

//Find the Square root using function

function sq(a){

    console.log(Math.sqrt(a));

}sq(9)

**4. Guess a random number**

function a(guess){

    var value=Math.floor(Math.random()\*10)

    if(value==guess){

        console.log("you guessed right",value);

    }

    else{

        console.log("wrong",value);

    }

}a(5)

**5. Calculate no .of vowels**

//Calculate number of vowels in a string

var vow=["a","e","i","o","u"]

var str="Hello World "

var count=0

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

    for(j=0;j<vow.length;j++){

        if(str[i]==vow[j]){

            count++

        }

    }

}console.log(count);

**6. Delete the value in object**

var a={

    name:"hello",

    age:100

}

delete a.age

console.log(a);

**7. Starts with the character**

//Starts with specific character or not

var a="hello world"

var b=a.toUpperCase()

console.log(b.startsWith("H"));

**8.Loop in a Object**

var a={

    name:"Helo"

    ,age:100

}

for(var b in a){

    console.log(b,a[b]);

}

9. Merge property for object

//Merge using assign

var a={

    name:"Vinay"

}

var b={

    age:100

}

console.log(Object.assign(a,b));

10.Generate random string

//Generate random String

var str="hello World"

var a=Math.floor(Math.random()\*10)

console.log(str[a]);

11. Date and time

//date & Time

var day=new Date()

var d=day.toLocaleDateString()

var e=day.toLocaleTimeString()

console.log(d);

console.log(e);

12. Replace a string

var a="hello world"

console.log(a.replace("hello","bye"));

13. Push into array

var a=[]

for(i=0;i<10;i++){

    a.push(i)

} console.log(a);

14. Pop an array

var a=[1,2,3,4,5]

for(j=a.length;j>=0;j--){

    a.pop()

} console.log(a);

15. Duplicates in a string

var a=[2,2,3,3,4,4,5,5]

var b=[]

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

    if(!b.includes(a[i])){

        b.push(a[i])

    }

}console.log(b);

16.New line in a string

var a="hello \n world"

console.log(a);

17. Number of keys in a object

var a={

    name:"hello",

    age:100,

    city:"rjy"

}

var count=0

for(var b in a){

    count++

}

console.log(count);

18. Type of the variable

function a(b){

    console.log(typeof(a));

}a("Hello")

19. Swapping of two numbers

var a=10

var b=20

var temp

temp=a

a=b

b=temp

console.log(a,b);

//Function in swap

function swap(a,b){

    var temp=a

    a=b

    b=temp

    console.log(a,b);

}swap(10,20)

20. Kilometers to Miles

//Kilometers to Miles

 var k=20

 console.log(k\*0.62137);

 //function in Km to M

 function m(k){

    console.log(k\*0.62137);

 }m(20)

21. Celsius to F

//Celcius to F

var t=32

console.log((t\*9/5)+32);

//Function C to F

function temperature(c){

    console.log((t\*9/5)+32);

}temperature(32)

22. Generate random number& Check if random number is equal to the number you Guessed

//Generate random Number

console.log(Math.floor(Math.random()\*10));

//Guess the random number without promt

function Guess(a){

    var random=Math.floor(Math.random()\*10)

    if(a==random){

         console.log(`You Guessed Right ${a} The random number is ${random}`);

    }

    else{

         console.log(`You Guessed Wrong ${a} The random number is ${random}`);

    }

}Guess(5)

23. If the Number is Positive or negative or zero

//+ve or -ve or zero

var a=0

if(a>=0){

    if(a==0){

        console.log(a,"Zero");

    }

    else{

        console.log(a,"+ve");

    }

}

else{

    console.log(a,"-ve");

}

//function for to find +ve or -ve or zero

function PNZ(a)

{

    (a>=0)&&(a==0)?console.log(a,"Zero"):(a>0)?console.log(a,"+ve"):console.log(a,"-ve")

}

PNZ(-5)

24. Even or ODD

//Odd or Even

 var a=10

 if(a%2==0){

    console.log(a,"Even");

 }

 else{

    console.log(a,"Odd");

 }

//Function for odd or Even

function EOO(a){

    if(a%2==0){

    console.log(a,"Even");

 }

 else{

    console.log(a,"Odd");

 }

}EOO(5)

25. Biggest of Three

//Largest of Three

var a=100

var b=200

var c=30

if((a>b)&&(a>c)){

    console.log(a,"a is big");

}

else if((b>a)&&(b>c)){

    console.log(b,"b is big");

}

else{

    console.log(c,"c is big");

}

//Function for biggest of three

function Big(a,b,c){

    (a>b)&&(a>c)?  console.log(a,"a is big"):(b>a)&&(b>c)? console.log(b,"b is big"):  console.log(c,"c is big")

}Big(11,20,3)

26. Prime or not

//Prime or Not using count variable

 var a=4

 var count=0

 for(i=1;i<=a;i++){

    if(a%i==0){

        count++

    }

 }

 if(count==2){

    console.log(a,"Prime");

 }

 else{

    console.log(a,"Not Prime");

 }

 //function for prime or not

 function Prime(a){

    var isPrime=true

    for(i=2;i<a;i++){

        if(a%i==0){

            isPrime=false

        }

     }

     if(isPrime){

        console.log(a,"Prime");

     }

     else{

        console.log(a,"Not prime");

     }

    }Prime(2)

    Prime(4)

27. Prime in a interval

function Prime(b,c){

    for(a=b;a<=c;a++){

        var isPrime=true

    for(i=2;i<a;i++){

        if(a%i==0){

            isPrime=false

        }

     }

     if(isPrime){

        console.log(a,"Prime");

     }

     else{

        console.log(a,"Not prime");

     }

    }

    }Prime(10,50)

28. Multiplication table

//Multiplication table

var a=10

for(var i=1;i<=10;i++){

    console.log(`${a}\*${i}=${a\*i}`);

}

//Function for Multiplication table

function Multiplication(a){

    for(var i=1;i<=10;i++)

        {

    console.log(`${a}\*${i}=${a\*i}`);

        }

}Multiplication(17)

29. Armstrong or Not

//Armstrong number

const a=1630

var b=a.toString()

var temp=a

var sum=0

var rem=0

while(temp>0){

    rem=temp%10

    sum+=rem\*\*b.length

    temp=Math.floor(temp/10)

}

if(sum==a){

    console.log(a,"Armstrong");

}

else{

    console.log(a,"Not Armstrong");

}

//function for armstrong

function Arm(num){

var b=num.toString()

var temp=num

var sum=0

var rem=0

while(temp>0){

    rem=temp%10

    sum+=rem\*\*b.length

    temp=Math.floor(temp/10)

}

if(sum==num){

    console.log(num,"Armstrong");

}

else{

    console.log(num,"Not Armstrong");

}

}Arm(150)

//function for Armstrong in Interval

function Arm(num1,num2){

    var n1=num1.toString()

    var n2=num2.toString()

    if(n1.length>=3 && n2.length>=3)

    {

            for(i=num1;i<=num2;i++)

        {

            var b=i.toString()

            var temp=i

            var sum=0

            var rem=0

            while(temp>0){

                rem=temp%10

                sum+=rem\*\*b.length

                temp=Math.floor(temp/10)

                    }

            if(sum==i){

                console.log(i,"Armstrong");

                    }

            else{

                console.log(i,"Not Armstrong");

            }

        }

    }

    else{

        console.log("Enter more than 3 Digit number");

    }

}Arm(100,2000)

**30.Simple calculator**

//Simple calculator

var operator="\*"

var a=10

var b=20

switch(operator){

    case "+":

        console.log(a+b,"Addition");

        break;

    case "-":

        console.log(a-b,"Subtraction");

        break;

    case "\*":

        console.log(a\*b,"Multiplication");

        break;

    case "/":

        console.log(a/b,"Division");

        break;

    case "%":

        console.log(a%b,"Modulus");

        break;

    default:

          console.log("Enter valid operator");

          break;

}

//function for calculator

function calculator(val1,val2,operator){

    switch(operator){

    case "+":

        console.log(val1+val2,"Addition");

        break;

    case "-":

        console.log(val1-val2,"Subtraction");

        break;

    case "\*":

        console.log(val1\*val2,"Multiplication");

        break;

    case "/":

        console.log(val1/val2,"Division");

        break;

    case "%":

        console.log(val1%val2,"Modulus");

        break;

    default:

          console.log("Enter valid operator");

          break;

}

}calculator(10,20,"\*")

**31. Sum of natural numbers**

//Sum of natural numbers

var a=5

var sum=0

for(i=a;i>=1;i--){

    sum+=i

}

console.log(sum);

//function for Sum of natural numbers

function natural(a){

    var sum=0

for(i=a;i>=1;i--){

    sum+=i

}

console.log(sum);

}natural(10)

**32. Sum of natural numbers using recursion**

//Sum of natural numbers with recursion

function natural(a){

    if(a>0){

        return a+natural(a-1)

    }

    else{

        return a;

    }

}

console.log(natural(5));

**33. Check if the given numbers have the same last digit**

//Check if the number has the same last digit or not

var a=101

var b=202

if(a%10==b%10){

    console.log(a,b," Both has the same last digit");

}

else{

      console.log(a,b," Both doesn't has the same last digit");

}

//Function for check same last digit

function last(a,b){

    if(a%10==b%10){

    console.log(a,b," Both has the same last digit");

}

else{

      console.log(a,b," Both doesn't has the same last digit");

}

}last(101,200)

**34. Check if the given string or number is a palindrome or not**

var a=102

var value=a.toString()

if(value.split("").reverse().join("")==value)

    {

    console.log(a," is palindrome");

}

else{

     console.log(a,"is Not a palindrome");

}

//function for checking palindrome

function palindrome(a){

var value=a.toString()

if(value.split("").reverse().join("")==value)

    {

    console.log(a," is palindrome");

}

else{

     console.log(a,"is Not a palindrome");

}

}palindrome(101)

**35. Replace a string**

//Replace a string

var a="hello World"

console.log(a.replace("hello","bye"));

//function for replace a string

function rep(a){

    console.log(a.replace("hello","bye"));

}rep("hello world")

**36. Replace single characters in a string using Splice**

var a="hello"

var val=a.split("")

var result=val.splice(1,2,"a","b")

console.log(val);

**37. Reverse a string**

//Reverse a string

var a="hello World"

console.log(a.split("").reverse().join(""));

// function for reverse a string

function rev(a){

var val=a.toString()

console.log(val.split("").reverse().join(""));

}rev(102)

**38. Create a object**

//Create object

var obj={

    name:"hello"

}

obj.age=100

console.log(obj);

**39. Remove property from object**

var obj={

    name:"hello",

    age:100

}

delete obj.name

console.log(obj);

**40. Multiline string**

//Multiline string

var a="hello \nWorld"

console.log(a);

**41.Set timeout()**

**42.Clone a JS object**