1.Create a function that takes two numbers as arguments and returns their sum.

```
let a = +prompt("enter 1st number")
let b= +prompt("enter 2nd number")
function sumofab(a,b){
    return a+b;
}
console.log(sumofab(a,b))
```

o/p:

enter 1st number10
enter 2nd number20
30

2.Write a function that takes an integer minutes and converts it to seconds.

```
var min = +prompt("enter minutes  ")
function minutestoseconds(min)
{
    return min*60;
}
console.log(minutestoseconds(min))
```

o/p:
enter minutes 60
3600

3.Create a function that takes a number as an argument, increments the number by +1 and returns the result.

```
var number = +prompt("enter a number for increment  ")
function increment(number)
{
    number++;
    return number;
}
console.log(increment(number))
```

o/p:

enter a number for increment 4
5

4.Create a function that takes the age in years and returns the age in days.

```
var age = +prompt("enter age  ")
function ageyearintodays(age)
{

    return age*365;
}
console.log(ageyearintodays(age))
```

o/p:

```
enter age  10
3650
```


5.sniCreate a function that takes voltage and current and returns the calculated power.

```
var voltage = +prompt("enter voltage  ")

var current = +prompt("enter current  ")

function power(voltage,current)
{
    return voltage*current;
}

console.log(power(voltage,current));
```


o/p:

```
enter voltage 5
enter current 5
25
```

6.Write a function that returns the string "something" joined with a space " " and the given argument a.

```
var text = prompt("enter some text")
function textintogreeting(text)
{
return "something" + " " + text;
}
console.log(textintogreeting(text))
```

o/p:
enter some text: hi
something hi

7.Create a function that takes two arguments. Both arguments are
integers, a and b. Return true if one of them is 10 or if their sum is
10.

```
var a=+prompt("enter a number");
var b=+prompt("enter another number");
function both_sum_same(a,b){
    return ((a===10)||(b==10)) || (a+b === 10)
}
console.log(both_sum_same(a,b));
```

o/p:
enter a number5
enter another number5
true

8.Create a function that takes two strings as arguments and returns
either true or false depending on whether the total number of
characters in the first string is equal to the total number of
characters in the second string.

```
var str1=prompt("enter a string :")
var str2=prompt("enter a string :")

function stringsameornor(str1,str2){
    // return str1.length === str2.length ;

    var count1 = 0;
    for (let i of str1){
        count1++;
    }
    var count2=0;
    for (let j of str2){
        count2++;
    }
    return count1 == count2;
}

console.log(stringsameornor(str1,str2));
```

o/p:

enter a string :mutton

enter a string :prawns
true

9.Create a function that takes a name and returns a greeting in the
form of a string. Don't use a normal function, use an arrow function.

```
var name = prompt("enter a  name : ")
var greeting = "happy Birthday ! "
let wishes = (greeting,name) => greeting+name;
console.log(wishes(greeting,name))
```

o/p:

enter a name : nandi
happy Birthday ! nandi

10.Create a function that takes an array of 10 numbers (between 0 and
9) and returns a string of those numbers formatted as a phone number
(e.g. (555) 555-5555).

```
num = [9,3,9,1,1,2,6,6,9,3]
function numberformat(num){
var a="";
var b="";
var c="";
for(var i=0 in num){
    if(i<3)
     {
     a=a+num[i];
     }
    else if (i>=3 && i<6)
    {
     b=b+num[i];
    }
    else if (i>=6 && i<=10)
    {
     c=c+num[i];
    }
}
return (a+"-"+b+"-"+c);

}
console.log(numberformat(num));
```

o/p:
939-112-6693

11.Create a function that returns an array of strings sorted by length
in ascending order.
Example:
sortByLength(["a", "ccc", "dddd", "bb"]) → ["a", "bb", "ccc", "dddd"]

ans:
n=["a", "ccc", "dddd", "bb"]

```
function sortbylength(n)
{
    for(var i=0;i<n.length;i++)
{
    for(var j=0;j<n.length-i-1;j++)
    {

        if(n[j].length > n[j+1].length)
        {
            var temp=0;
            temp=n[j];
            n[j]=n[j+1]
            n[j+1]=temp;
        }

    }
}
return n;

}
console.log(sortbylength(n));
```

o/p:

['a', 'bb', 'ccc', 'dddd']

12.Create a function that takes an array of arrays with numbers. Return
a new (single) array with the largest numbers of each.
Example:
findLargestNums([[4, 2, 7, 1], [20, 70, 40, 90], [1, 2, 0]]) → [7, 90,
2]

ans:

13.Create a function that takes an array of numbers and returns the
second largest number.

Example:
secondLargest([10, 40, 30, 20, 50]) → 40

ans:
n=[10, 40, 30, 20, 50]
```
function secondlargest(n)
{
    for(var i=0;i< n.length;i++)
{
    for(var j = i+1;j< n.length;j++)
    {
       if(n[i] > n[j]) {
           var temp = n[j];
            n[j]=n[i];
            n[i]=temp;
       }
    }
}
var count=0;
for (var i of n)
{
    count++;
}

return "second largest number is : " + n[count-2];

}
console.log(secondlargest(n));
```

o/p:
second largest number is : 40

14
15

16.Create a function that takes two strings as arguments and returns
the number of times the first string (the single character) is found in
the second string.
Example:

charCount("c", "Chamber of secrets") → 1

a="Chamber of secrets"
```
function findsinglechar(a)
{
    var count=0
```

```
    for (let i of a)
    {
        if  (i == "C")
        {

        count++;
        }
    }
    return count;
}
console.log(findsinglechar(a));

o/p:
1
```

17.Create a function that takes a string and returns the number (count)
of vowels contained within it.
Example:

countVowels("Celebration") → 5

```
a="Celebration"
function countVowels(a)
{
    var count=0

    for (let i of a)
    {
      if (i == "a" || i == "e" || i=="i" ||i=="o" || i=="u")
      {
          count++;
      }
    }
    return count;
}
console.log(countVowels(a));

o/p:
5
```

18.Given a string, create a function to reverse the case. All
lower-cased letters should be upper-cased, and vice versa.
Example:
reverseCase("Happy Birthday") → "hAPPY bIRTHDAY"

```
ans;
n="Happy Birthday"
function reverseCase(n){
```

```
    var a="";
for(i = 0;i<n.length;i++)
{
    if(n.charCodeAt(i) > 65 && n.charCodeAt(i) <= 90  )
    {
        a = a + n[i].toLowerCase();
    }
    else if(n[i] == " ")
    {
        a = a + " ";
    }
    else if(n.charCodeAt(i) > 91 && n.charCodeAt(i) <= 122  )
    {
        a = a + n[i].toUpperCase();
    }

}
return a;
}

console.log(reverseCase(n));

o/p:
hAPPY bIRTHDAY
```

19.Take one integer n, loop till n and pass each value to a function, create a function that takes one integer parameter, and multiply with 2 in every integer.

```
                    Input:      n=5
                    Output:   2 4 6 8 10
     Explanation:  Loop start with 1 go till 5 bcoz n=5
                   1 x 2 =2, 2 x 2=4, 3 x 2=6 …..etc
```

```
var n=5;
var a=" ";

function mutliples0fn(n)
{
    for (let i =1;i<=n;i++)
    {
     a += 2*i+" ";
    }
    return a;
}
console.log(mutliples0fn(n));
```

o/p:
2 4 6 8 10

20.Create Function that will take one parameter and return type of the data.

Input: 500
Output: Integer

Input: Coding
Output: String

```
var input =  prompt()
function to_identify_datatype(input)
{
    return (typeof input);
}
console.log(to_identify_datatype(input));
```

o/p:
500 string (i got an error)
coding string

21.

22 . C Program to find factorial of number.

Input: n=5
Output: 120

Explanation: 5 x 4 x 3 x 2 x 1 = 120

```
var n=+prompt("enter number for to know the factorial value : ")
function factorial(n)
{
    let sum=1;
    for(let i=1;i<=5;i++)
    {
        sum*=i;
    }
    return sum;
}
console.log(factorial(n));
```

o/p:

enter number for to know the factorial value : 5

23. C Program to arrange numbers in ascending order

                              Input: [2,3,1,5,4]
                              Output: [1,2,3,4,5]

                              Sort the Array using loop only(you can not use
predefined function).

```
ans:n=[2,3,1,5,4]
function ascendingorder(n)
{
    for(var i=0;i< n.length;i++)
{
    for(var j = i+1;j< n.length;j++)
    {
       if(n[i] > n[j])
       {
          var temp = n[j];
           n[j]=n[i];
           n[i]=temp;
       }
    }
}
return "ascendind order : " + n;
}


console.log(ascendingorder(n));
```

o/p:

[1, 2, 3, 4, 5]

24. Print Patter using loop.

                              1
                              1 2
                              1 2 3
                              1 2 3 4
                              1 2 3 4 5

```
var n=+prompt("enter number for pattern: ")
var st=" ";
```

```
function pattern1(n)
{
    for(let i=1;i<=n;i++)
    {
        for (let j=1;j<=i;j++)
        {
            st = st + j ;
        }
    }
    return st;

}
console.log(pattern1(n));
```

o/p:

enter number for pattern: 5
 112123123412345


```
 var n = +prompt("enter range for pattern");
      for (let i = 1; i <= n; i++) {
        for (let j = 1; j <= i; j++) {
          console.log(j);
        }
        console.log("\n");
      }
```

o/p:
1

1
2

1
2
3

25. C Program to Calculate the Power of a Number(using loop only).

                         Input: n=5, p=3
                         Output: 5 ^ 3 = 125
                         Explanation: 5 x 5 x 5 = 125

```
n=+prompt("enter a value to calculate power")
p=+prompt("enter exponential value for number")

function calculatepower(n,p)
{
    var sum=1;
    for (let i=1;i<=p;i++)
    {
        sum = sum*n;
    }
    return sum;
}
console.log(" power of number " +n +" is number "+ p+" is exponential
value  : " + calculatepower(n,p));
```

26. Program to Check Whether a Number is Prime or Not

                        Input: 9
                        Output: 9 is not a prime no

                        Input: 7
                        Output : 7 is a prime no

ans:
```
number = +prompt("enter a number to check prime or not: ")
function PrimeorNot(number)
{
isPrime=true;
if ( number >  1 )
{
for (let i = 2; i < number; i++)
    {
        if (number % i == 0)
        {
            isPrime = false;
            break;
        }
    }
}
return isPrime?number+" is prime number":number+" is not a prime
number";
}

console.log(PrimeorNot(number));
```

o/p:
enter a number to check prime or not: 67
67 is prime number

27. Program to find LCM of two numbers using while loop

                          Input: 15 50
                          Output: Lcm of 15 and 50 is 150.

ans:
```
var n1=+prompt("enter number for lcm : ")
var n2=+prompt("enter number for lcm : ")
function findlcm(n1,n2)
{
    var greater =0;
    var lcm=0;
    if (n1 > n2)
    {
        greater = n1;
    }
    else {
        greater = n2;
    }

    while (true)
    {
        if((greater%n1 == 0) && (greater%n2 == 0))
        {
            lcm = greater;
            break;
        }
        greater+=1;
    }

    return  "lcm is : " + lcm;
}
console.log(findlcm(n1,n2))
```

o/p:
enter number for lcm : 54
enter number for lcm : 24
216

28.Program to Display Characters from A to Z Using Loop with count.

Output: A1 B2 C3 D4 E5 F6 ……. Z26

ans:
```
function AtoZwithCount(){
var c=0;
for(i=65;i<=90;i++)
{
    c++;
    var a = String.fromCharCode(i);
    console.log(a+" "+ c);

}
}
console.log(AtoZwithCount());
```

o/p:
A1 B2 C3 D4 E5 F6 ……. Z26

29

30.30. Program to count vowels and consonants in a given String.

Input: i am ram
Output: 3 vowels 3 consonants.

```
a="i am ram"
var vowels=0;
var consonants=0;
var gap=0;
for(var i of a)
{

    if(i == "a"||i == "e"||i == "i"||i == "o"||i == "u")
    {
      vowels++
    }
    else if(i == " "){
          gap++;
        }

    else{
        consonants++;
    }
}
console.log(vowels + " vowels " + consonants + " consonants ")
```

o/p:

3 vowels 3 consonants

31. program to insert the elements of an array for specific index.

                         Input: [1,2,3,4,5,7,8,9,10] , index=5
                         Output: [1,2,3,4,5,6,78,9,10]
ans:
var n=[1,2,3,4,5,7,8,9,10]
var index=5;
for(var i=0;i<n.length;i++)
{
    if(i == index)
    {
        n[i]=6;
    }

}
console.log(n);

32.Reverse a number using while loop

input :123
output:321

a=123
var rem=0;sum=0;

while(a>0)
{
    rem=a%10;
    sum = (sum*10)+rem ;
    a=Math.floor(a/10);
}
console.log(sum)

o/p:
321

33.Count occurrence of number:

Input: [1,6,3,1,5,9,7,2,1,9,3,7,8,9,10] , no find=7

Output: 7 present 2 times.

```
a=[1,6,3,1,5,9,7,2,1,9,3,7,8,9,10]
find=7
var count=0;
for(let i of a)
{
    if ( i == find)
    {
        count++
    }
}
console.log(find + " present "+count+" times")
```

o/p:
7 present 2 times