1. Write a program which illustrates all arithmetic operators

ANS;

```
var a = 12;
var b = 2;
add = a + b
sub = a + b
mult = a * b
div = a / b
mod = a % b
console.log(add)
console.log(sub)
console.log(mult)
console.log(div)
console.log(mod)
output;
PS D:\Assingment> node day1.js
14
14
24
6
0
```

2. Write a program which illustrates all logical operators

```
var a1 = true && true;

var a2 = true && false;

console.log(a1)

console.log(a2)

var b1 = true  true;

var b2 = true  false;

var b3 = false || false;

console.log(b1)

console.log(b2)

PS D:\Assingment> node day1.js
true
false
true
true
```

3 Find the greatest of two numbers.

```
 a = 20
 b = 30
if (a > b) {
console.log('a is greater than b')
}
else {
 console.log('b is greater than a')
}
```

```
 PS D:\Assingment>  node day1.js

 b is greater than a
```

4.Greatest of three numbers.

```
a = 20

b = 22

c = 33

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

    console.log('a is great')

}

else if(b>c){

    console.log('b is greater')

}

else {

    console.log('c is greater')

}
```

```
PS D:\Assingment>  node day1.js
c is greater
```

5 Find a given number is odd or even.

```
var number = 5
if(number % 2 == 0) {
    console.log("The number is even.");
}
else {
    console.log("The number is odd.");
}
```

```
PS D:\Assingment>  node day1.js
The number is odd.
```

6 Swapping of two numbers

```
let a = 12;
let b = 55;
let temp;
temp = a;
a = b;
b = temp;
console.log(a);
console.log(b );
```

```
PS D:\Assingment> node day1.js
55
12
```

7..Convert Fahrenheit_ to celsius

```
F = 90;

C = (F-32 ) * 5/9

console.log(C)
```

PS D:\Assingment> node day1.js

32.22222222222222

8 Check given number is positive, negative or zero\

```
  a = 6;

if(a > 0)

{

   console.log("The number is Positive")

}

else if(a < 0)

{

   console.log("The number is Negative")

}

else

{

   console.log("The Number is Zero")

}
```

PS D:\Assingment> node day1.js

The number is Positive

9 Check given number is prime or not

```
let number = 2

let isPrime = true;

if (number === 1) {

    console.log("1 is neither prime nor composite number.");

}

else if (number > 1) {

    for (let i = 2; i < number; i++) {

        if (number % i == 0) {

            isPrime = false;

            break;

        }

    }

}



if (isPrime) {

    console.log(`${number} is a prime number`);

} else {

    console.log(`${number} is a not prime number`);

}
```

2 is a prime number

10. Find factorial of a number

```
  num =11;

f =1;

for ( i = 1; i<= num; i++){

   f = f*i

}

console.log(f)
```

39916800

11. Write a program which involves adding and removing values to array at beginning and at the end.

```
let dob = ["23","77","55"]

dob.pop();

console.log(dob)



let panno = ["2222","22456","4555"]

panno.unshift("2222446");

console.log(panno)

PS D:\Assingment> node day1.js

[ '23', '77' ]

[ '2222446', '2222', '22456', '4555' ]
```

12 Write a program to print n natural numbers

```
h = 14;

for(var i = 1 ; i <15 ; i++){

    console.log(i)

}

PS D:

PS D:\Assingment>  node day1.js

1

2

3

4to30
```

13..Program to print fibonacci series of n numbers

```
let a = 0, b = 1, c, z = 10;

console.log('Fibonacci Series:');

for (let i = 1; i <= z; i++) {

    console.log(a);

    c = a + b;

    a = b;

    b = c;

}

\PS D:\Assingment> node day1.js

Fibonacci Series:

0
```

```
1

1

2

3

5

8
```

14 Program to find sum of n numbers

```
var a = 90;
var s = 0;
for(var i = 1; i <= a; i++)
s += i;
console.log(s);
var a = 90;
var s = 0;
for(var i = 1; i <= a; i++)
s += i;
console.log(s);
outp
4095
```

15 Write a program to print n odd numbers

```
for(var n = 1; n <= 10; n+=2)

console.log(n)
```

1
3
5
7
9