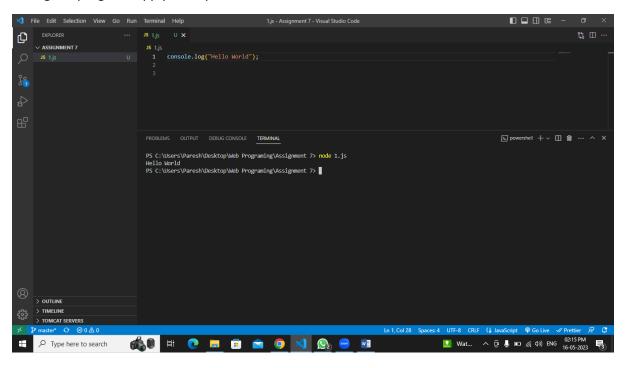
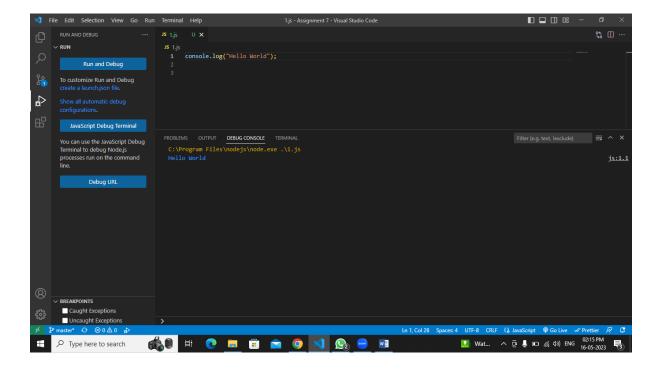
I Write your first nodejs Program.

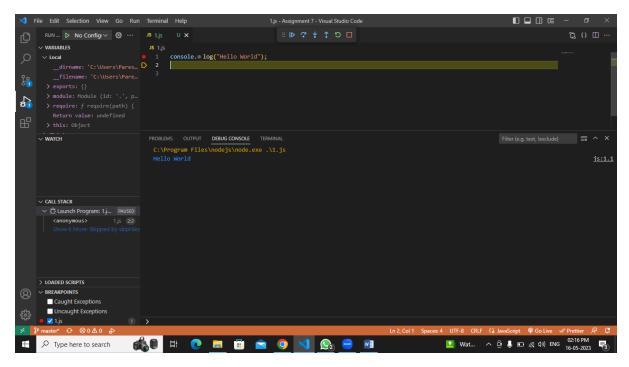
Run the program using command prompt.

Run the program using Run And Debug option

Debug the program, apply breakpoint.





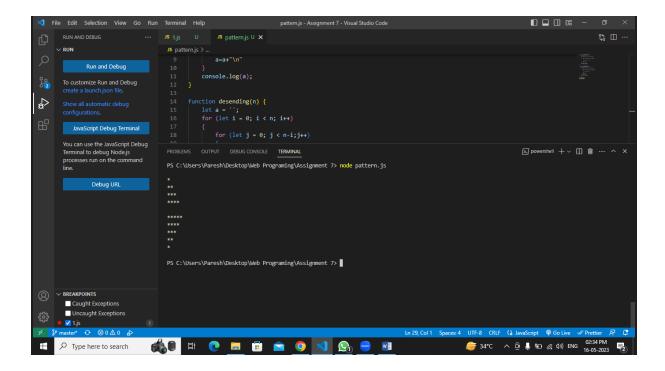


II Pattern Program - Print Star Ascending, Descending.

```
function assending(n) {
    let a = '';
    for (let i = 0; i < n; i++)
    {
        for (let j = 0; j < i; j++)
        {
            a = a + '*';
        }
        a=a+"\n"
    }
    console.log(a);
}

function desending(n) {
    let a = '';
    for (let i = 0; i < n; i++)
    {
        for (let j = 0; j < n-i; j++)
        {
            a = a + '*';
        }
        a=a+"\n"
    }
    console.log(a);
}

assending(5)
desending(5)</pre>
```



III Practice and display

- 1 Variable Declaration [Var Let Const Var vs let vs const]
- 2 String Single quote Double Quote Backtick

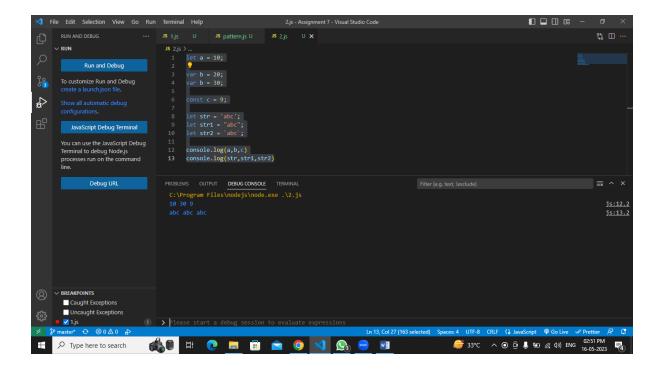
```
let a = 10;

var b = 20;
var b = 30;

const c = 9;

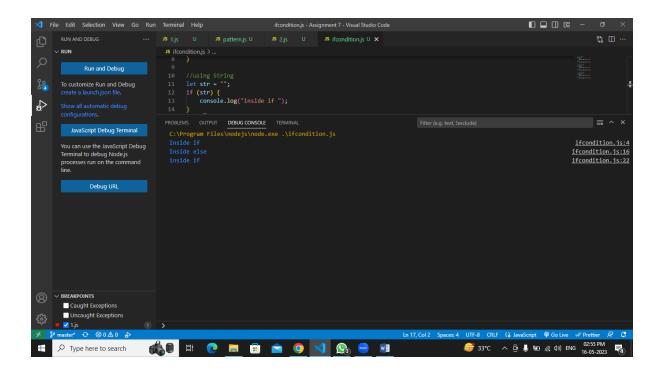
let str = 'abc';
let str1 = "abc";
let str2 = `abc`;

console.log(a,b,c)
console.log(str,str1,str2)
```



3 Writing if condition with Boolean String Number object

```
//using number
let a = 1;
if (a) {
    console.log("inside if ");
else {
    console.log("Inside else");
//using String
let str = "";
if (str) {
    console.log("inside if ");
else {
    console.log("Inside else");
//using boolean
let b = true;
if (b) {
    console.log("inside if ");
else {
    console.log("Inside else");
```

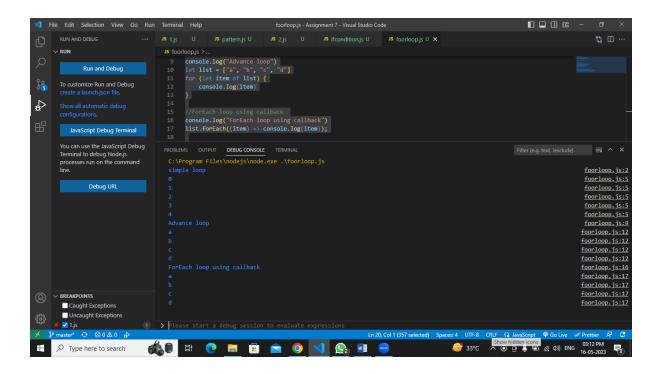


4 Basic for loop Advanced for loop for Each using callback

```
//simple loop
console.log("simple loop")
for (let i = 0; i < 5; i++)
{
      console.log(i);
}

//Advance loop
console.log("Advance loop")
let list = ["a", "b", "c", "d"]
for (let item of list) {
      console.log(item)
}

//ForEach loop using callback
console.log("ForEach loop using callback")
list.forEach((item) => console.log(item));
```



- 5 Create Named Function Overloaded Named Function Named function with default value.
- 6 Create a named function Call function with, 2 input param 0 param 1 param 2 param
- 3 param
- 7 Putting Condtion Putting shortcut using || By Default Value

```
console.log(`Function Overloading
calling function using different parameters`)
function mul(num1, num2)
{
    return num1 * num2;
}
//Function Overloading
//calling function using different parameters
console.log(mul()); //with no parameters

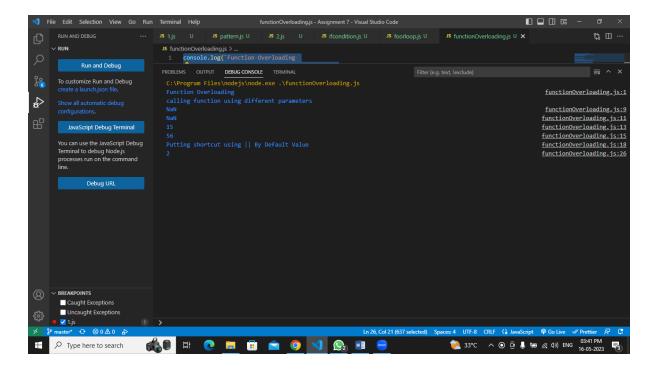
console.log(mul(1)); //with one parameters

console.log(mul(3,5));//with required parameters

console.log(mul(8, 7, 2));//with three parameters

//Putting shortcut using || By Default Value
console.log("Putting shortcut using || By Default Value")
function add(num1, num2)
{
```

```
num1 = num1 || 0;
num2 = num2 || 0;
return num1 + num2;
}
console.log(add(2));
```



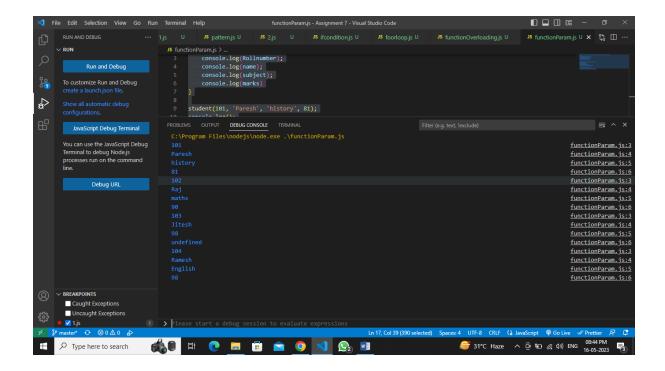
8 Define function that accepts unordered param - Pass all the param -Pass less param Define with default value - Accepts less param Pass more param.

```
function student(Rollnumber, name = 'Raj', subject = 'maths', marks ) {
    console.log(Rollnumber);
    console.log(name);
    console.log(subject);
    console.log(marks)
}

student(101, 'Paresh', 'history', 81);
console.log();
let name = 'Raj'
let subject = 'maths'
student(102, name, subject, 90);

student(103, 'Jitesh', 98)

student(104, 'Ramesh', 'English', 98, 67)
```



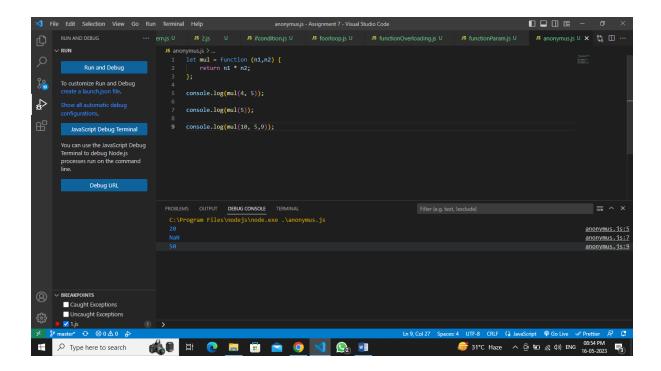
9 Create Anonymous Function Overloaded Anonymous Function Anonymous function with default value

```
let mul = function (n1,n2) {
    return n1 * n2;
};

console.log(mul(4, 5));

console.log(mul(5));

console.log(mul(10, 5,9));
```



10 Create Arrow Function , Overloaded Arrow Function , Arrow function with $\operatorname{default}$

Value

```
let div=(n1, n2) => {
    return n1 / n2;
}

console.log(div(6, 7))

console.log(div(6))

console.log(div(4,2,7))
```

