TASK 1:

OUTPUT:

```
This page says
Hello,World!
```

TASK 2:

</html>

OUTPUT:

TASK 3:

OUTPUT:

```
        Addition: 25
        task.html:11

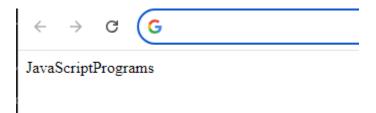
        Subtraction: 15
        task.html:12

        Multiplication: 100
        task.html:13

        Division: 4
        task.html:14
```

TASK 4:

```
<!DOCTYPE html>
<html>
```



TASK 5:

OUTPUT:



TASK 6:

```
<!DOCTYPE html>
<html>
```

Single-line Comment:

Syntax: // (in languages like C++, Java, JavaScript) or # (in Python).

Scope: Quick explanations or annotations for one-liners.

Multi-line Comment:

Syntax: /* to start and */ to end (in languages like C++, Java, JavaScript).

Scope: Used for block-level descriptions or commenting out larger sections of code.

TASK 7:

OUTPUT:

45 Malar

TASK 8:

```
<!DOCTYPE html>
<html>
  <head>
<meta charset ="UTF-8">
<meta name : "viewport" content="width+device_width,initial-scale=1.0">
 <body>
   <script>
          let mark = 80;
          if(mark >=50)
            document.writeln("The student has passed"+ "<br>");
            if(mark > = 75)
            document.writeln("The student score good marks"+ "<br>");
          else{
            document.writeln("The student try to get good marks"+ "<br>");
          else{
            document.writeln("The student has failed");
    </script>
  </body>
```

OUTPUT:



The student has passed The student score good marks

TASK 9:

```
<!DOCTYPE html>
<html>
```



Nalsa Nithya true

TASK 10:

OUTPUT:



Welcome to javascript programming!



Welcome to javascript programming!

The statement executed in head tags instead of using body tag.

Execution Timing:

<head>: The script executes before the content is loaded, blocking page rendering until the script finishes.

<body>: The script executes after the content is rendered, allowing the page to load and display to the user without delay.

Impact on Page Load:

<head>: Can slow down the perceived page load time as it blocks rendering until the script is fully executed.

<body>: Improves perceived load time because the page content is displayed first, with the script running afterward.

TASK 11:

```
<!DOCTYPE html>
<html>
    <head>
<meta charset ="UTF-8">
<meta name : "viewport" content="width+device_width,initial-scale=1.0">
    </head>
```

← → C (i) File C:/Users/student/Desktop/330/task.html

20 yalini

TASK 12:

OUTPUT:

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Uncaught ReferenceError ReferenceError: num is not defined

at <anonymous> (c:\Users\student\Desktop\330\task.html:10:13)
```

TASK 13:

```
<!DOCTYPE html>
 <head>
<meta charset ="UTF-8">
<meta name : "viewport" content="width+device_width,initial-scale=1.0">
 <body>
   <script>
       "use strict";
      let name= "kavitha";
      delete name;
      "use strict";
      function myfunction(){
       retun Kavi;
      delete myfunction;
      "use strict";
       function myfunction( This statement executed sucessfully)
      delete myfunction;
   </script>
 </body>
</html>
```

```
PROBLEMS (8) OUTPUT DEBUG CONSOLE TERMINAL PORTS

Uncaught SyntaxError SyntaxError: Delete of an unqualified identifier in strict mode.

at (program) (c:\Users\student\Desktop\330\task.html:11:15)
```

TASK 14:

TASK 15:

OUTPUT:

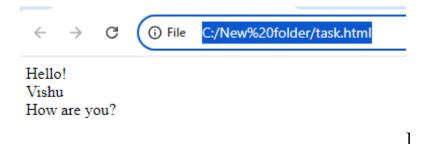


Malarvizhi 21

TASK 16:

```
<!DOCTYPE html>
<html>
    <head>
<meta charset ="UTF-8">
<meta name : "viewport" content="width+device_width,initial-scale=1.0">
    </head>
    <body>
        <script>
```

```
let s = "Hello!";
  var string = "vishu";
  const str = " How are you?";
  document.writeln(s + "<br>");
  document.writeln(string+ "<br>");
  document.writeln(str+ "<br>");
  </script>
  </body>
  </html>
```



Use **var** only when you need compatibility with legacy code or specific behavior regarding function or global scope (but generally avoid it in new code).

Use **let** for variables that are re-assigned, especially when the scope is block-level (like in loops or conditionals).

Use **const** for variables that should not be reassigned, which helps with readability and maintainability by signaling that a variable's value will remain constant.

TASK 17:

```
<!DOCTYPE html>
<html>
    <head>
<meta charset ="UTF-8">
<meta name : "viewport" content="width+device_width,initial-scale=1.0">
    </head>
    <body>
        <script>
            const str = " How are you?";
            str = "What are you doing?";
            document.writeln(str+ "<br>
            </body>
        </html>
```

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Uncaught TypeError TypeError: Assignment to constant variable.

at <anonymous> (c:\New folder\task.html:10:15)
```

TASK 18:

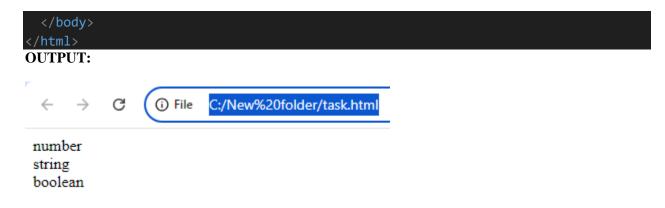
```
<!DOCTYPE html>
<html>
    <head>
<meta charset ="UTF-8">
<meta name : "viewport" content="width+device_width,initial-scale=1.0">
    </head>
    <body>
        <script>
            var value ;
            document.writeln(value+ "<br>
            </body>
        </html>
```

OUTPUT:



undefined

TASK 19:



TASK 20:

```
<!DOCTYPE html>
<html>
  <head>
<meta charset ="UTF-8">
<meta name : "viewport" content="width+device_width,initial-scale=1.0">
  </head>
  <body>
    <script>
        var value = 35;
        num = 67;
        document.writeln(num+ "<br>");
        </script>
        </body>
    </html>
```

OUTPUT:



67

TASK 21:

```
var value = 35;
       let bool = true ;
       let a = null ;
       var x;
       let manager ={
            name:"hema",
            age : 21
       };
       document.writeln(name+ "<br>");
       document.writeln(value+ "<br>");
       document.writeln(bool+ "<br>");
        document.writeln(a+ "<br>");
       document.writeln(x+ "<br>");
       document.writeln(manager.name+ "<br>");
        document.writeln(manager+ "<br>");
   </script>
 </body>
</html>
```

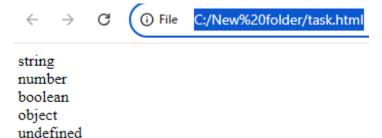
```
← → C (i) File C:/New%20folder/task.html

Hi
35
true
null
undefined
hema
[object Object]
```

TASK 22:

```
<!DOCTYPE html>
<html>
    <head>
<meta charset ="UTF-8">
<meta name : "viewport" content="width+device_width,initial-scale=1.0">
    </head>
    <body>
        <script>
            var name = "Hi";
            var value = 35 ;
            let bool = true ;
            let a = null ;
```

```
var x;
    document.writeln(typeof(name)+ "<br>");
    document.writeln(typeof(value)+ "<br>");
    document.writeln(typeof(bool)+ "<br>");
    document.writeln(typeof(a)+ "<br>");
    document.writeln(typeof(x)+ "<br>");
    </script>
    </body>
</html>
```



TASK 23:

```
<!DOCTYPE html>
 <head>
<meta charset ="UTF-8">
<meta name : "viewport" content="width+device_width,initial-scale=1.0">
 <body>
   <script>
        var symbol = "Hello!!";
       var value = 43;
       let bool = true ;
       var x;
        document.writeln(typeof(symbol)+ "<br>");
        document.writeln(typeof(value)+ "<br>");
        document.writeln(typeof(bool)+ "<br>");
        document.writeln(typeof(x)+ "<br>");
    </script>
 </body>
</html>
```



TASK 24:

```
<!DOCTYPE html>
<html>
<head>
<meta charset ="UTF-8">
<meta name : "viewport" content="width+device_width,initial-scale=1.0">
</head>
<body>
<script>
    let name = null;
    document.writeln(typeof(name)+ "<br>
</body>
</html>
```

OUTPUT:



object

TASK 25:



Hi Everyone! 23

VAR:

Scope: Function scope or global scope

Hoisting: Hoisted and initialized to undefined

Re-declaration: Allowed in the same scope

LET:

Scope: Block scope (inside {} block)

Hoisting: Hoisted but not initialized (temporal dead zone)

Re-declaration: Not allowed in the same scope

TASK 26:

TASK 27:

OUTPUT:



TASK 28:

true

```
<!DOCTYPE html>
<html>
    <head>
<meta charset ="UTF-8">
<meta name : "viewport" content="width+device_width,initial-scale=1.0">
    </head>
    <body>
```

TASK 29:

```
<!DOCTYPE html>
<html>
<head>
<meta charset ="UTF-8">
<meta name : "viewport" content="width+device_width,initial-scale=1.0">
</head>
<body>
<script>

let a=20;
console.log("post increment:" + a++,a);

let b = 36;
console.log("post decrement:" + b--,b);
</script>
</body>
</html>
```

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

post increment:20 21

post decrement:36 35
```

TASK 30:

```
<!DOCTYPE html>
<html>
<meta charset ="UTF-8">
<meta name : "viewport" content="width+device_width,initial-scale=1.0">
  <body>
   <script>
          let a=20;
          let x = 3;
          let y = 74;
          let b = 36;
          let result = x * y + --a \% (b/x);
          console.log("Result:" + result);
          let set = b*(x \% a) - y;
          console.log(set);
    </script>
  </body>
</html>
```

OUTPUT:

```
PROBLEMS OUTPUT <u>DEBUG CONSOLE</u> TERMINAL PORTS

Result:229

34
```

TASK 31:

```
<!DOCTYPE html>
<html>
    <head>
<meta charset ="UTF-8">
<meta name : "viewport" content="width+device_width,initial-scale=1.0">
    </head>
```

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Relational Operations are:
false
false
true
true
```

TASK 32:

OUTPUT:

```
PROBLEMS OUTPUT <u>DEBUG CONSOLE</u> TERMINAL PORTS
true
false
```

TASK 33:

OUTPUT:

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

false
false
```

TASK 34:

```
console.log(a!=b);
    console.log(a!==b);

    </script>
    </body>
    </html>
```

```
PROBLEMS OUTPUT <u>DEBUG CONSOLE</u> TERMINAL PORTS
false
true
```

TASK 35:

OUTPUT:

```
PROBLEMS OUTPUT <u>DEBUG CONSOLE</u> TERMINAL PORTS

true

false
```

TASK 36:

```
<!DOCTYPE html>
<html>
    <head>
<meta charset ="UTF-8">
```

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

The even number is: 6
```

TASK 37:

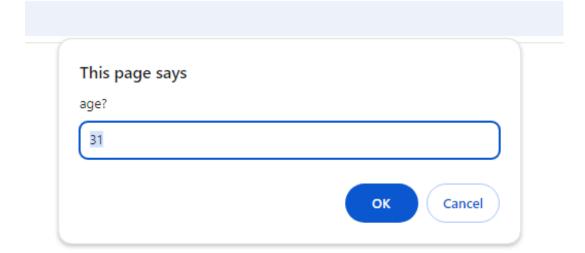
```
</body>
</html>
```

```
PROBLEMS OUTPUT <u>DEBUG CONSOLE</u> TERMINAL PORTS

The number is negative
```

TASK 38:

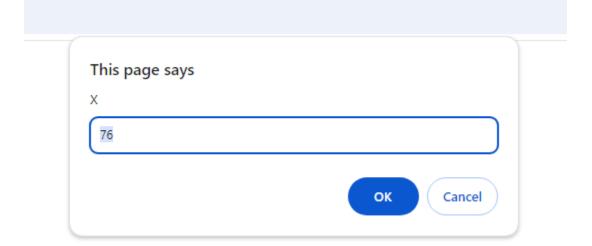
OUTPUT:





TASK 39:

OUTPUT:





TASK 40:

OUTPUT:

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Positive number
```

TASK 41:

```
let X = 56;
    let y = 0;
    console.log( X && y);
    console.log( X || y);
    console.log(!X);
    console.log(!y);
    </script>
    </body>
</html>
```

```
PROBLEMS OUTPUT <u>DEBUG CONSOLE</u> TERMINAL PORTS

0
56
false
true
```

TASK 42:

```
<!DOCTYPE html>
 <head>
<meta charset ="UTF-8">
<meta name : "viewport" content="width+device_width,initial-scale=1.0">
 </head>
 <body>
   <script>
          let x = 12;
          let y = 67;
          let z = 45;
          if( x>y && x>z)
            console.log("X is largest");
         else if(y> z)
            console.log("y is largest");
          else{
            console.log("z is largest");
   </script>
```

```
</body>
</html>
```

```
PROBLEMS OUTPUT <u>DEBUG CONSOLE</u> TERMINAL PORTS

y is largest
```

TASK 43:

OUTPUT:

```
PROBLEMS OUTPUT <u>DEBUG CONSOLE</u> TERMINAL PORTS

false
true
```

TASK 44:

```
let B = 12;
    console.log( A && B);
    console.log( A || B);
    </script>
    </body>
</html>
```

```
PROBLEMS OUTPUT <u>DEBUG CONSOLE</u> TERMINAL PORTS

12
23
```

TASK 45:

```
<!DOCTYPE html>
<html>
<meta charset ="UTF-8">
<meta name : "viewport" content="width+device_width,initial-scale=1.0">
  <body>
    <script>
          let str = " HELLO";
          let str1 = " Hi";
          console.log(str && str1);
          console.log(str || str1);
          let A = 45;
          let B = 12;
          console.log(A && B);
          console.log(A | | B);
    </script>
  </body>
```

OUTPUT:

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Hi

HELLO

12

45
```

TASK 46:

OUTPUT:

```
PROBLEMS OUTPUT <u>DEBUG CONSOLE</u> TERMINAL PORTS

57
```

TASK 47:

```
<!DOCTYPE html>
<html>
    <head>
<meta charset ="UTF-8">
<meta name : "viewport" content="width+device_width,initial-scale=1.0">
    </head>
    <body>
        <script>
            let length = 7;
            let width = 3;
            let area = function(length ,width)
            {
                 return length * width;
            }
            console.log(area(length , width));
```

```
</script>
</body>
</html>
```

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
21
```

TASK 48:

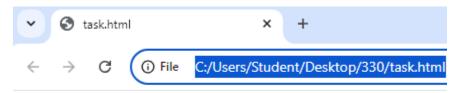
```
<!DOCTYPE html>
<html>
<head>
<meta charset ="UTF-8">
<meta name : "viewport" content="width+device_width,initial-scale=1.0">
</head>
<body>
<script>

let a = 2;
let b = 7;
let result = function()
{
 console.log(a + b);
}
 result ();
</script>
</body>
</html>
```

OUTPUT:

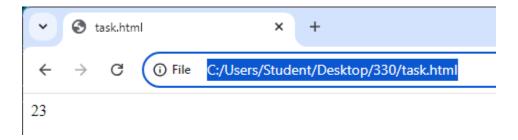
```
PROBLEMS OUTPUT <u>DEBUG CONSOLE</u> TERMINAL PORTS
9
```

TASK 49:



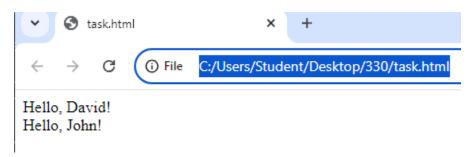
undefined

TASK 50:



TASK 51:

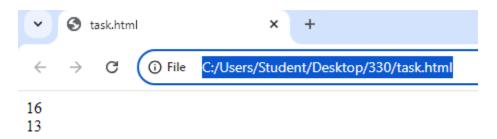
OUTPUT:



TASK 52:

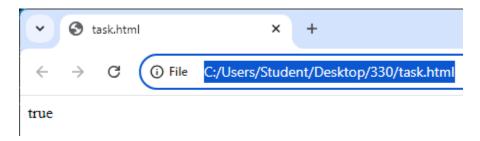
```
<!DOCTYPE html>
<html>
<meta charset ="UTF-8">
<meta name : "viewport" content="width+device_width,initial-scale=1.0">
 <body>
   <script>
       let num1 = 9, num2 = 7;
       let sum = (num1,num2)=>
            return (num1+num2);
         document.writeln(sum(num1,num2) +"<br>");
         let num =5, num3 = 8;
         let sum1 = (num,num3)=>
            return (num+num3);
         document.writeln(sum(num,num3) +"<br>");
    </script>
  </body>
</html>
```

OUTPUT:



TASK 53:

```
<!DOCTYPE html>
<html>
    <head>
<meta charset ="UTF-8">
<meta name : "viewport" content="width+device_width,initial-scale=1.0">
    </head>
    <body>
```



TASK 54:

```
<!DOCTYPE html>
<html>
    <head>
<meta charset ="UTF-8">
<meta name : "viewport" content="width+device_width,initial-scale=1.0">
    </head>
    <body>
        <script>
            let Maxvalue =(a,b) =>
            {
                if(a>b)
            {
                  return a;
            }
             else
```

```
{
    return b;
}
document.writeln(Maxvalue( 7,3) +"<br>");
</script>
</body>
</html>
OUTPUT:

    OUTPUT:

C:/Users/Student.MAT-31.002/Desktop/330/task.html
```

7

TASK 55:

```
<!DOCTYPE html>
<html>
<meta charset ="UTF-8">
<meta name : "viewport" content="width+device_width,initial-scale=1.0">
  <body>
    <script>
       let myObject = {
         value :23,
         multiplyTradition: function(num){
            return this.value*num;
         },
         multiplyArrow:(num)=>{
            return this.value*num;
         },
        };
    console.log(myObject.multiplyTradition(6));
   console.log(myObject.multiplyArrow(6));
    </script>
  </body>
</html>
```

OUTPUT:

```
PROBLEMS OUTPUT <u>DEBUG CONSOLE</u> TERMINAL PORTS

138

NaN
```