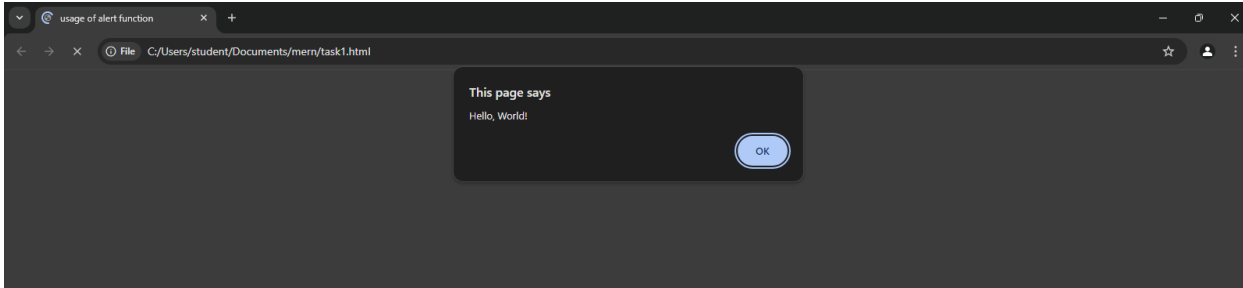


Task 1:

```
<html>
<head>
  <title>usage of alert function</title>
</head>
<body>
  <script>
    alert("Hello, World!");
  </script>
</body>
</html>
```

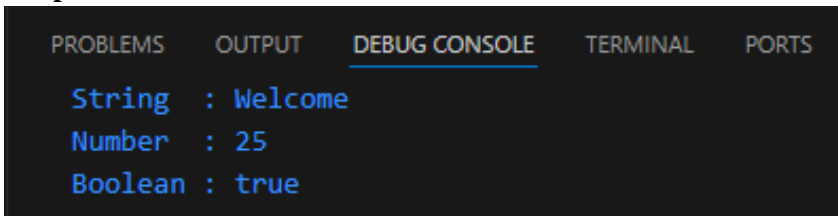
Output:



Task 2:

```
<html>
<head>
  <title>Data Types in JavaScript</title>
</head>
<body>
  <script>
    var string = "Welcome";
    var number = 25;
    var boolean = true;
    console.log("String : " + string);
    console.log("Number : " + number);
    console.log("Boolean : " + boolean);
  </script>
</body>
</html>
```

Output:



Task 3:

```
<html>
<head>
  <title>Arithmetic Operations in JavaScript</title>
</head>
<body>
  <script>
```

```
var a = 25;
var b = 5;
console.log("Addition      : " + (a + b));
console.log("Subtraction   : " + (a - b));
console.log("Multiplication : " + (a * b));
console.log("Division      : " + (a / b));
</script>
</body>
</html>
```

Output:

PROBLEMS	OUTPUT	DEBUG CONSOLE	TERMINAL	PORTS
	Addition	: 30		
	Subraction	: 20		
	Multiplication	: 125		
	Division	: 5		

Task 4:

```
<html>
<head>
  <title>Concatenation of two strings</title>
</head>
<body>
  <script>
    var str1 = "Buy one, ";
    var str2 = "Get one!";
    console.log(str1 + str2);
  </script>
</body>
</html>
```

Output:

PROBLEMS	OUTPUT	DEBUG CONSOLE	TERMINAL	PORTS
	Buy one, Get one!			

Task 5:

```
<html>
<head>
  <title>typeof keyword</title>
</head>
<body>
  <script>
    console.log(typeof undefined);
    console.log(typeof 2);
    console.log(typeof "abcd");
    console.log(typeof false);
    console.log(typeof 10n);
  </script>
</body>
</html>
```

Output:

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

undefined
number
string
boolean
bigint
object
symbol
```

Task 6:

```
<html>
<head>
  <title>Comments in JS</title>
</head>
<body>
  <script>
    var a = 20; //declaring a and assigning the value 20 to a
    var b = 10; //declaring b and assigning the value 10 to b
    var c = a * b;
    /*
    Multiplying the value of a and b and then
    storing the value in a new variable c
    */
    console.log(c);
  </script>
</body>
</html>
```

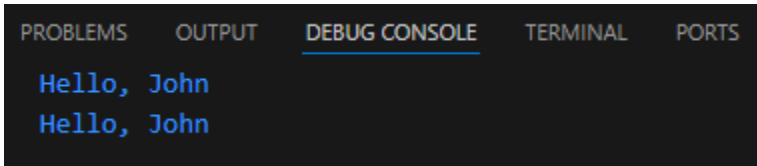
Output:

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

200
```

Task 7:

```
<html>
<head>
  <title>Semicolon example</title>
</head>
<body>
  <script>
    var name = "John";
    console.log("Hello, "+name);
  </script>
  <script>
    var name = "John"
    console.log("Hello, "+name)
  </script>
</body>
</html>
```

Output:


```

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

Hello, John
Hello, John

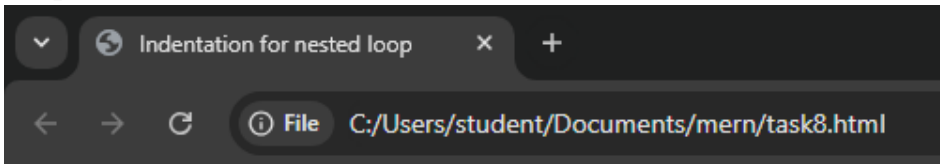
```

Task 8:

```

<html>
<head>
  <title>Indentation for nested loop</title>
</head>
<body>
  <script>
    for(i=1;i<=5;i++){
      for(j=1;j<=i;j++){
        document.write(j+" ");
      }
      document.write("<br>");
    }
  </script>
</body>
</html>

```

Output:


```

Indentation for nested loop
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5

```

```

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

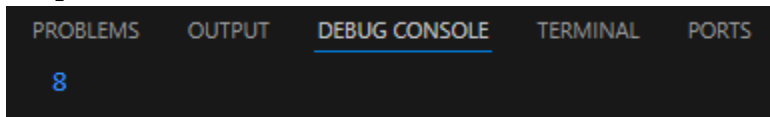
```

Task 9:

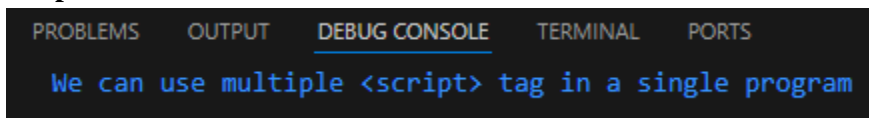
```

<html>
<head>
  <title>Multiple variables in a single line</title>
</head>
<body>
  <script>
    var a,b,c;
    a = 64;
    b = 8;
    c = a / b;
    console.log(c);
  </script>
</body>
</html>

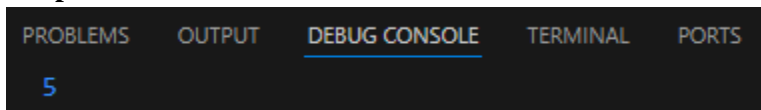
```

Output:**Task 10:**

```
<script></script>
<html>
<head>
  <title>Script tag</Script></title>
</head>
<body>
  <script>
    console.log("We can use multiple <script> tag in a single program");
  </script>
</body>
</html>
<script></script>
```

Output:**Task 11:**

```
<html>
<head>
  <title>Without using strict</title>
</head>
<body>
  <script>
    a = 5;
    console.log(a);
  </script>
</body>
</html>
```

Output:**Task 12:**

```
<html>
<head>
  <title>using strict</title>
</head>
<body>
  <script>
    "use strict";
    a = 5;
    console.log(a);
  </script>
</body></html>
```

Output:

```

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

> Uncaught ReferenceError ReferenceError: a is not defined
    at <anonymous> (c:\Users\student\Documents\mern\task12.html:8:11)

```

Task 13:

```

<html>
<head>
  <title>Delete a variable using “use strict” method</title>
</head>
<body>
  <script>
    "use strict";
    var x = 14;
    console.log(x);
    delete x;
  </script>
</body>
</html>

```

Output:

```

PROBLEMS  1  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

> Uncaught SyntaxError SyntaxError: Delete of an unqualified identifier in strict mode.
    at (program) (c:\Users\student\Documents\mern\task13.html:10:16)

```

Task 14:

```

<html>
<head>
  <title>using strict</title>
</head>
<body>
  <script>
    a = 5;
    console.log(a);
    "use strict";
    b = 2;
    console.log(b);
  </script>
</body>
</html>

```

Output:

```

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

5
2

```

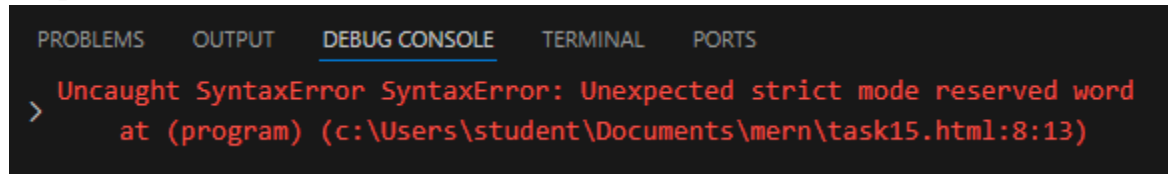
Task 15:

```

<html>
<head>
  <title>Reserved keyword</title>

```

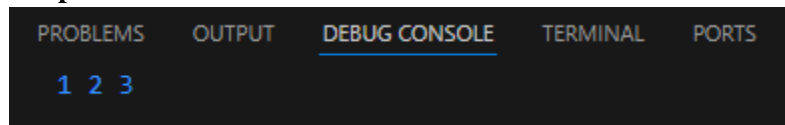
```
</head>
<body>
  <script>
    "use strict";
    var let = 5;
    console.log(let);
  </script>
</body>
</html>
```

Output:A screenshot of the VS Code Debug Console. The 'DEBUG CONSOLE' tab is selected. It shows a red error message: 'Uncaught SyntaxError SyntaxError: Unexpected strict mode reserved word at (program) (c:\Users\student\Documents\mern\task15.html:8:13)'.

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
> Uncaught SyntaxError SyntaxError: Unexpected strict mode reserved word
  at (program) (c:\Users\student\Documents\mern\task15.html:8:13)
```

Task 16:

```
<html>
<head>
  <title>keywords in JS</title>
</head>
<body>
  <script>
    var a = 1;
    let b = 2;
    const c = 3;
    console.log(a + " " + b + " " + c);
  </script>
</body>
</html>
```

Output:A screenshot of the VS Code Debug Console. The 'DEBUG CONSOLE' tab is selected. It shows the output '1 2 3' in blue text.

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
1 2 3
```

Task 17:

```
<html>
<head>
  <title>usage of const keyword</title>
</head>
<body>
  <script>
    const pi = 3.14;
    pi = 4.31;
    console.log(pi);
  </script>
</body>
</html>
```

Output:

```

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

> Uncaught TypeError TypeError: Assignment to constant variable.
   at <anonymous> (c:\Users\student\Documents\mern\task17.html:8:12)

```

Task 18:

```

<html>
<head>
  <title>usage of keywords</title>
</head>
<body>
  <script>
    var a;
    console.log(a);
  </script>
</body>
</html>

```

Output:

```

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

undefined

```

Task 19:

```

<html>
<head>
  <title>typeof keyword</title>
</head>
<body>
  <script>
    var a = 10;
    var b = "hello";
    var c = true;
    console.log(typeof a);
    console.log(typeof b);
    console.log(typeof c);
  </script>
</body>
</html>

```

Output:

```

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

number
string
boolean

```

Task 20:

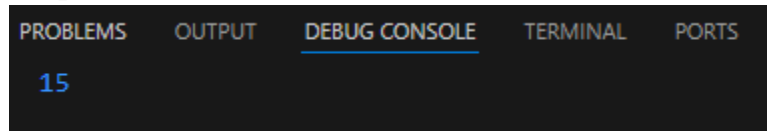
```

<html>
<head>
  <title>Renaming a variable</title>
</head>

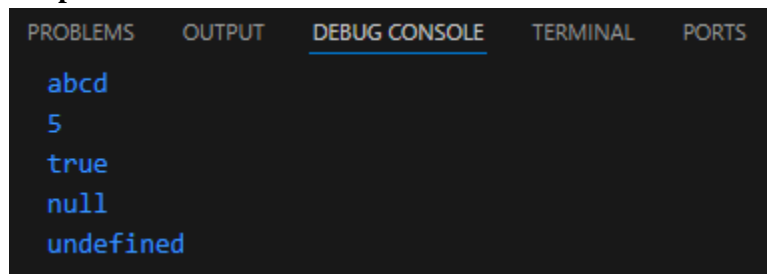
```



```
<body>
  <script>
    var a = 5;
    var b = a + 10;
    console.log(b);
  </script>
</body>
</html>
```

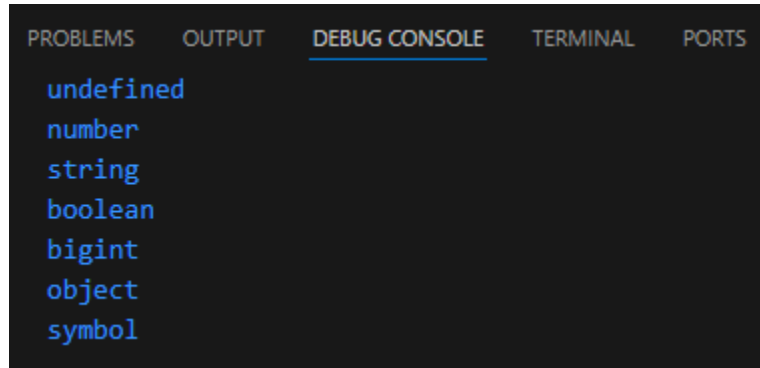
Output:**Task 21:**

```
<html>
<head>
  <title>Declaring a variable</title>
</head>
<body>
  <script>
    var a = "abcd";
    var b = 5;
    var c = true;
    var d = null;
    var e;
    console.log(a);
    console.log(b);
    console.log(c);
    console.log(d);
    console.log(e);
  </script>
</body>
</html>
```

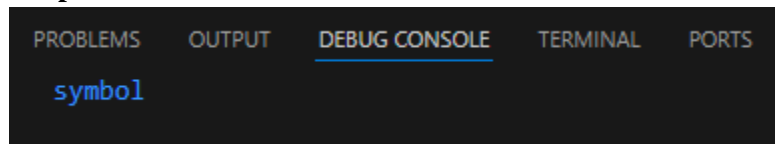
Output:**Task 22:**

```
<html>
<head>
  <title>typeof keyword</title>
</head>
<body>
  <script>
    console.log(typeof undefined);
    console.log(typeof 2);
```

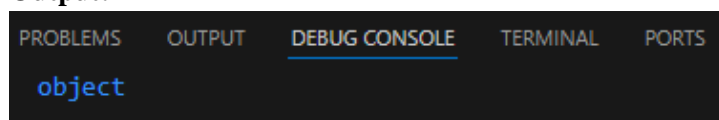
```
    console.log(typeof "abcd");
    console.log(typeof false);
    console.log(typeof 10n);
  </script>
</body>
</html>
```

Output:**Task 23:**

```
<html>
<head>
  <title>typeof keyword</title>
</head>
<body>
  <script>
    var d = Symbol("@");
    console.log(typeof d);
  </script>
</body>
</html>
```

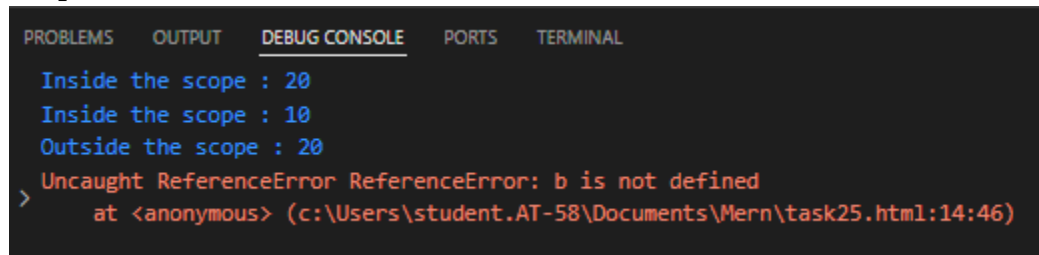
Output:**Task 24:**

```
<html>
<head>
  <title>typeof keyword</title>
</head>
<body>
  <script>
    var a = null;
    console.log(typeof a);
  </script>
</body>
</html>
```

Output:

Task 25:

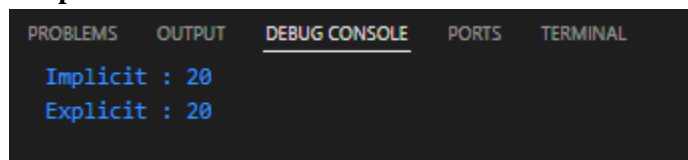
```
<html>
<head>
  <title>var and let keyword</title>
</head>
<body>
  <script>
    {
      var a = 20;
      let b = 10;
      console.log("Inside the scope : " + a);
      console.log("Inside the scope : " + b);
    }
    console.log("Outside the scope : " + a);
    console.log("Outside the scope : " + b);
  </script>
</body>
</html>
```

Output:

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  PORTS  TERMINAL
Inside the scope : 20
Inside the scope : 10
Outside the scope : 20
> Uncaught ReferenceError: ReferenceError: b is not defined
at <anonymous> (c:\Users\student.AT-58\Documents\Mern\task25.html:14:46)
```

Task 26:

```
<html>
<head>
  <title>implicit and explicit function</title>
</head>
<body>
  <script>
    var a = "20";
    console.log("Implicit : " + (a * 1));
    var b = parseInt(a);
    console.log("Explicit : " + b);
  </script>
</body>
</html>
```

Output:

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  PORTS  TERMINAL
Implicit : 20
Explicit : 20
```

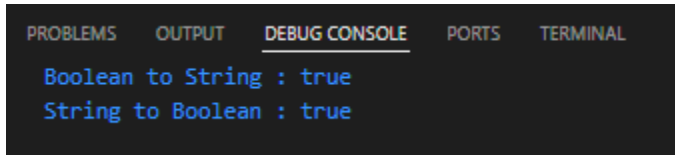
Task 27:

```
<html>
<head>
```

```

<title>string to boolean</title>
</head>
<body>
  <script>
    console.log("Boolean to String : "+String(true));
    console.log("String to Boolean : "+Boolean("true"));
  </script>
</body>
</html>
Output:

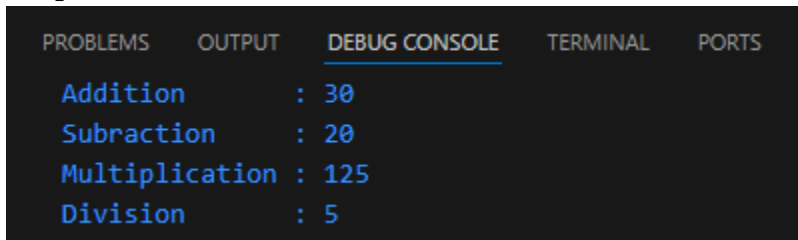
```

**Task 28:**

```

<html>
<head>
  <title>Arithmetic Operations in JavaScript</title>
</head>
<body>
  <script>
    var a = 25;
    var b = 5;
    console.log("Addition      : " + (a + b));
    console.log("Subtraction   : " + (a - b));
    console.log("Multiplication : " + (a * b));
    console.log("Division      : " + (a / b));
  </script>
</body>
</html>

```

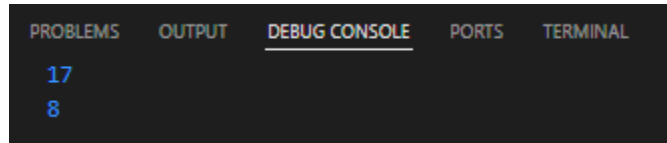
Output:**Task 29:**

```

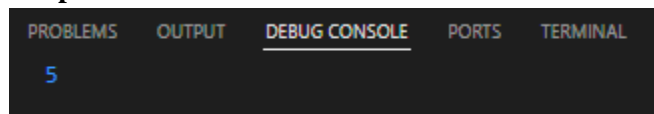
<html>
<head>
  <title>pre increment and post increment</title>
</head>
<body>
  <script>
    var x = 5;
    x += x++ + ++x;
    console.log(x);
    var y = 5;

```

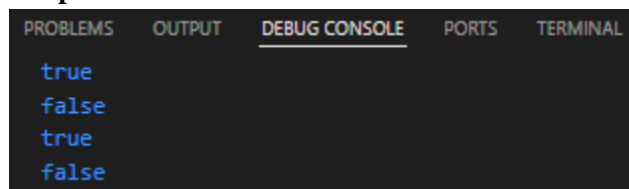
```
y = y-- + --y;  
console.log(y);  
</script>  
</body>  
</html>
```

Output:**Task 30:**

```
<html>  
<head>  
  <title>Arithmetic Operators</title>  
</head>  
<body>  
  <script>  
    var a = 5;  
    var b = 10;  
    console.log(a+b-a*b/a);  
  </script>  
</body>  
</html>
```

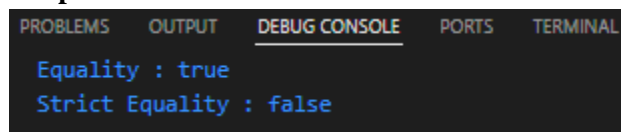
Output:**Task 31:**

```
<html>  
<head>  
  <title>Comparison Operators</title>  
</head>  
<body>  
  <script>  
    var a = 5;  
    var b = 10;  
    console.log(a < b);  
    console.log(a > b);  
    console.log(a <= b);  
    console.log(a >= b);  
  </script>  
</body>  
</html>
```

Output:

Task 32:

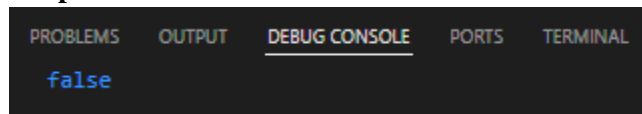
```
<html>
<head>
  <title>equality and strict equality</title>
</head>
<body>
  <script>
    var a = "10";
    var b = 10;
    console.log("Equality : "+(a==b));
    console.log("Strict Equality : "+(a===b));
  </script>
</body>
</html>
```

Output:

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  PORTS  TERMINAL
Equality : true
Strict Equality : false
```

Task 33:

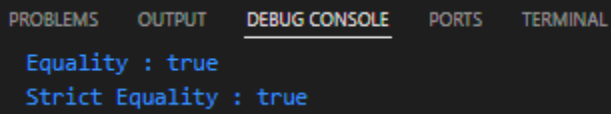
```
<html>
<head>
  <title>String comparison</title>
</head>
<body>
  <script>
    var a = "hello";
    var b = "hello";
    console.log(a == b);
  </script>
</body>
</html>
```

Output:

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  PORTS  TERMINAL
false
```

Task 34:

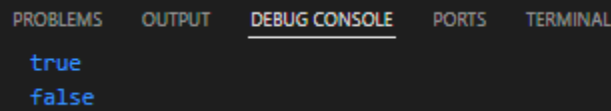
```
<html>
<head>
  <title>equality and strict equality</title>
</head>
<body>
  <script>
    var a = "10";
    var b = 20;
    console.log("Equality : "+(a!=b));
    console.log("Strict Equality : "+(a!==b));
  </script>
</body>
</html>
```

Output:

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  PORTS  TERMINAL
Equality : true
Strict Equality : true
```

Task 35:

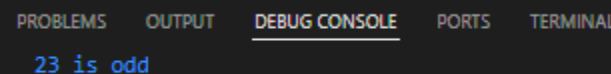
```
<html>
<head>
  <title>null and object</title>
</head>
<body>
  <script>
    var a = null;
    var b;
    console.log(a == b);
    console.log(a === b);
  </script>
</body>
</html>
```

Output:

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  PORTS  TERMINAL
true
false
```

Task 36:

```
<html>
<head>
  <title>odd or even</title>
</head>
<body>
  <script>
    var n = 23;
    if(n % 2 == 0){
      console.log(n + " is even");
    }
    else{
      console.log(n + " is odd");
    }
  </script>
</body>
</html>
```

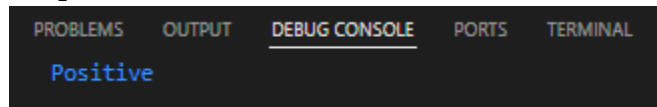
Output:

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  PORTS  TERMINAL
23 is odd
```

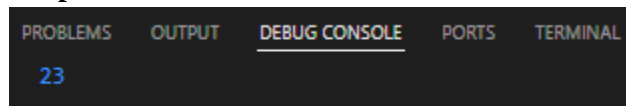
Task 37:

```
<html>
<head>
  <title>Nested if</title>
```

```
</head>
<body>
  <script>
    var n = 2;
    if(n != 0){
      if(n < 0){
        console.log("Negative");
      }
      else{
        console.log("Positive");
      }
    }
    else{
      console.log("Zero");
    }
  </script>
</body>
</html>
```

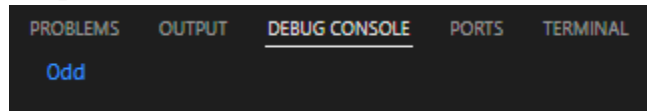
Output:**Task 38:**

```
<html>
<head>
  <title>terinary operator</title>
</head>
<body>
  <script>
    var n = 23;
    var m = 30;
    console.log(n < m ? n : m);
  </script>
</body>
</html>
```

Output:**Task 39:**

```
<html>
<head>
  <title>validity of a variable</title>
</head>
<body>
  <script>
    var n = 23;
    console.log((n % 2 == 0) ? "Even" : "Odd");
  </script>
</body>
```


</html>

Output:**Task 40:**

<html>

<head>

<title>validation</title>

</head>

<body>

<script>

var a = 20;

var b;

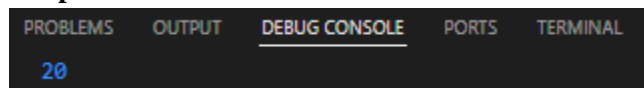
(a % 2 == 0) ? b = a : b = 5;

console.log(b);

</script>

</body>

</html>

Output:**Task 41:**

<html>

<head>

<title>comparison operators</title>

</head>

<body>

<script>

var a = 5;

var b = 10;

var c = 15;

var d = 0;

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

console.log(a);

}

if((c > b) || (c < a)){

console.log(c);

}

if(!d){

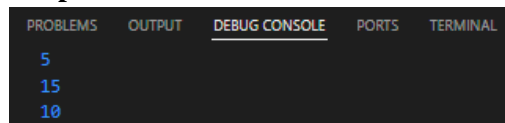
console.log(b);

}

</script>

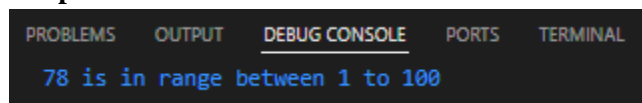
</body>

</html>

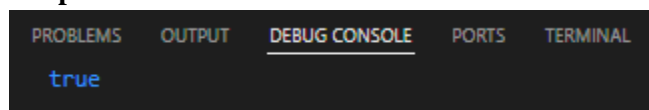
Output:

Task 42:

```
<html>
<head>
  <title>range calculation</title>
</head>
<body>
  <script>
    var n = 78;
    if((n > 0) && (n <= 100)){
      console.log(n + " is in range between 1 to 100");
    }
  </script>
</body>
</html>
```

Output:**Task 43:**

```
<html>
<head>
  <title>invert the boolean</title>
</head>
<body>
  <script>
    var boolean = false;
    console.log(!boolean);
  </script>
</body>
</html>
```

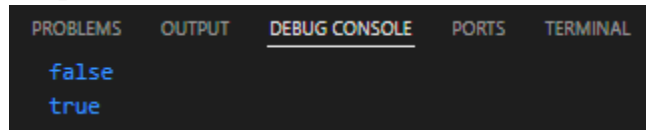
Output:**Task 44:**

```
<html>
<head>
  <title>short circuiting</title>
</head>
<body>
  <script>
    var a = false;
    var b = false;
    var c = true
    if(a && b && c){
      console.log(a);
    }
    else{
      console.log(b);
    }
  </script>
</body>
</html>
```

```
    if(c || a || b){
        console.log(c);
    }
    else{
        console.log(a);
    }
</script>
```

</body>

</html>

Output:**Task 45:**

<html>

<head>

<title>comparitive operations</title>

</head>

<body>

<script>

var a = 3;

var b = 4;

if(a == b){

console.log("true");

}

else{

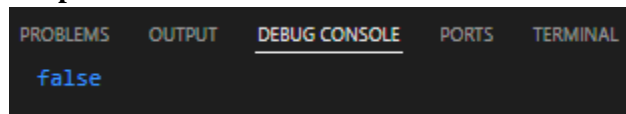
console.log("false");

}

</script>

</body>

</html>

Output:**Task 46:**

<html>

<head>

<title>sum of two numbers using function</title>

</head>

<body>

<script>

var m = 23;

var n = 35;

var o = fun(m,n);

function fun(m,n){

return m + n;

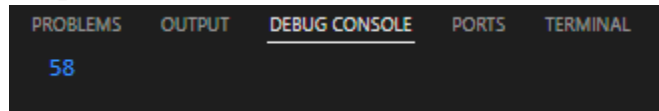
}

console.log(o);

```
</script>
```

```
</body>
```

```
</html>
```

Output:**Task 47:**

```
<html>
```

```
<head>
```

```
  <title>area of rectangle</title>
```

```
</head>
```

```
<body>
```

```
  <script>
```

```
    var length = 18;
```

```
    var width = 4;
```

```
    var o = fun(length,width);
```

```
    function fun(length,width){
```

```
      return length * width;
```

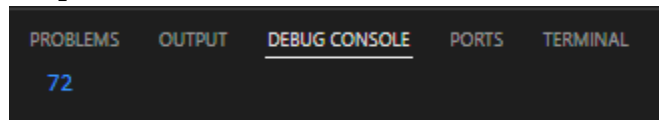
```
    }
```

```
    console.log(o);
```

```
  </script>
```

```
</body>
```

```
</html>
```

Output:**Task 48:**

```
<html>
```

```
<head>
```

```
  <title>function with no parameters</title>
```

```
</head>
```

```
<body>
```

```
  <script>
```

```
    var n = fun();
```

```
    function fun(){
```

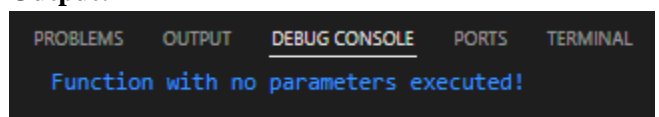
```
      console.log("Function with no parameters executed!");
```

```
    }
```

```
  </script>
```

```
</body>
```

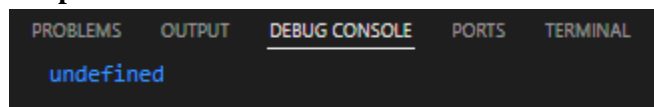
```
</html>
```

Output:**Task 49:**

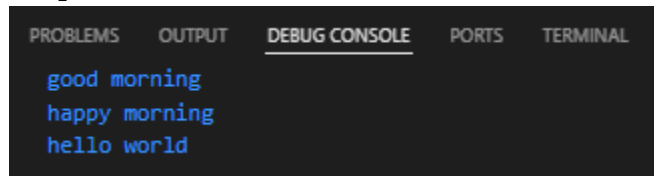
```
<html>
```

```
<head>
```

```
<title>function with undefined value</title>
</head>
<body>
  <script>
    function fun(){
      var a = 4;
      var b = 2;
      c = a + b;
    }
    var res=fun();
    console.log(res);
  </script>
</body>
</html>
```

Output:A screenshot of a web browser's developer console. The 'DEBUG CONSOLE' tab is selected. It shows a single line of output: 'undefined' in blue text.**Task 50:**

```
<html>
<head>
  <title>function with no parameters</title>
</head>
<body>
  <script>
    function call(a = "good",b = "morning"){
      console.log(a + " " + b);
    }
    call();
    call("happy");
    call("hello","world");
  </script>
</body>
</html>
```

Output:A screenshot of a web browser's developer console. The 'DEBUG CONSOLE' tab is selected. It shows three lines of output: 'good morning', 'happy morning', and 'hello world', each on a new line in blue text.