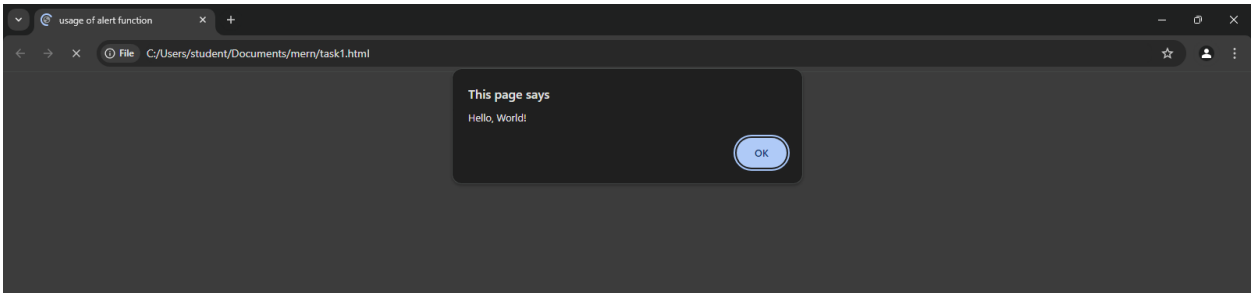
Task 1:

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

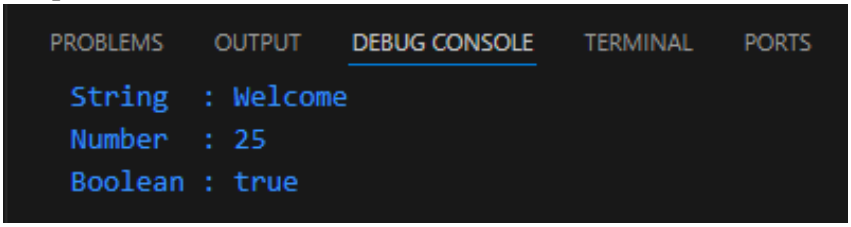
Output:



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:

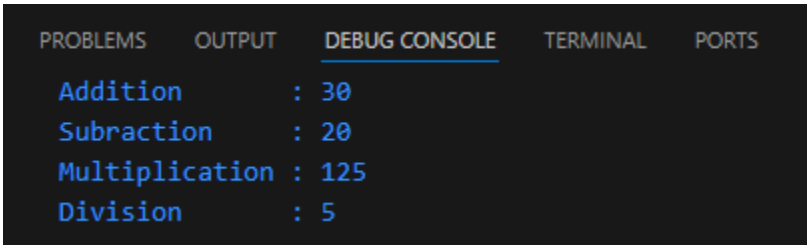


Task 3:

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

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

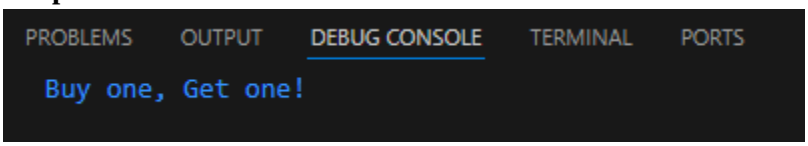
Output:



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>
```

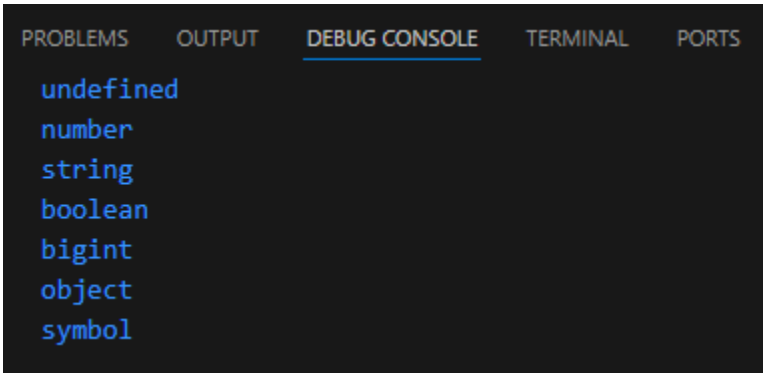
Output:



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>
```

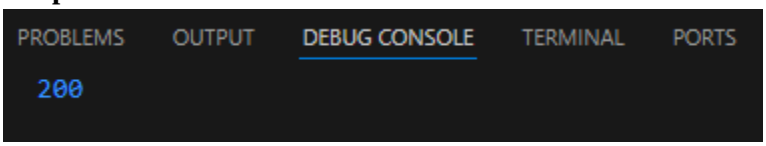
Output:



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>
```

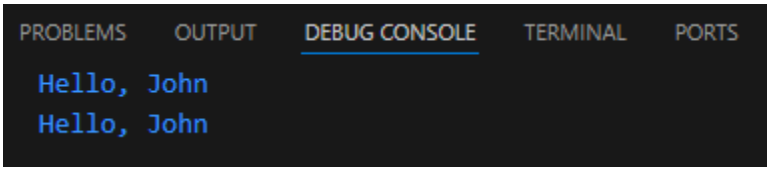
Output:



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>
```

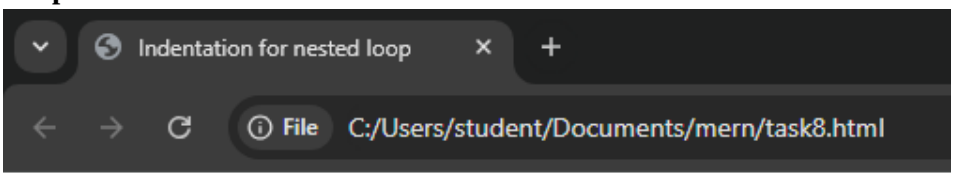
Output:



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:

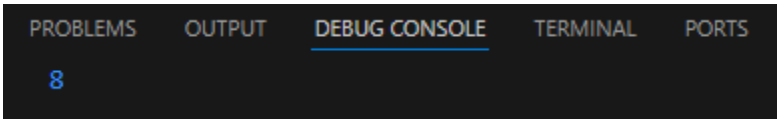


1
1 2
1 2 3
1 2 3 4
1 2 3 4 5

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>
```

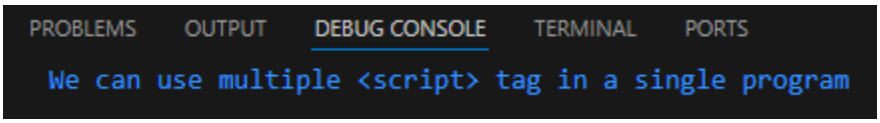
Output:



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>
```

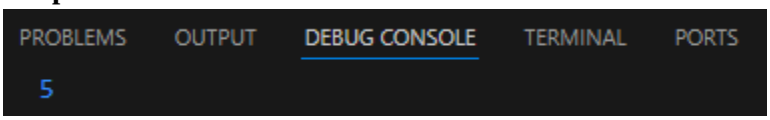
Output:



Task 11:

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

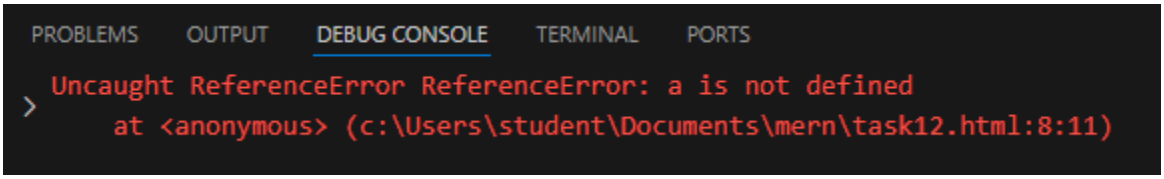
Output:



Task 12:

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

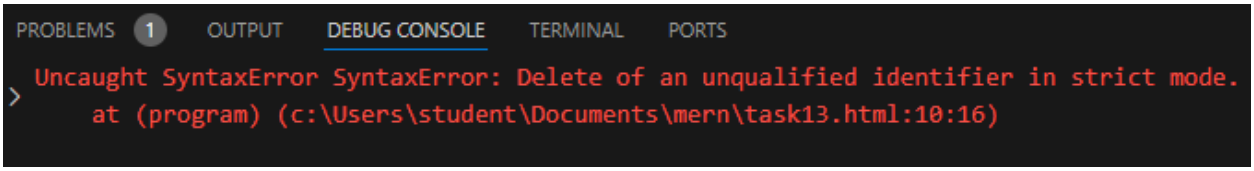
Output:



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>
```

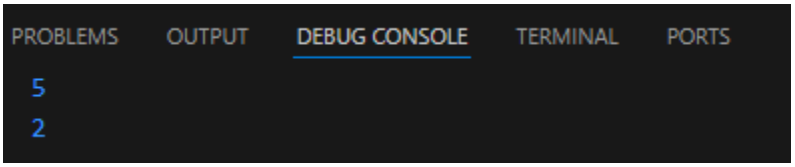
Output:



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:

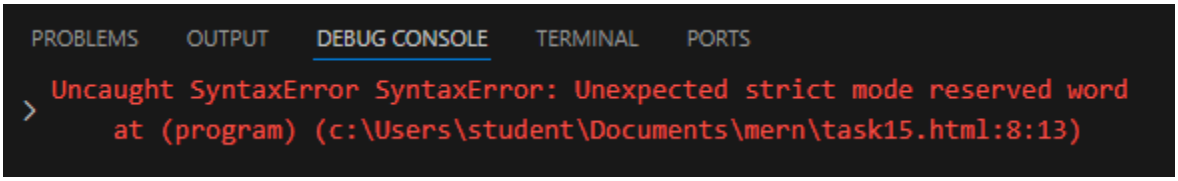


Task 15:

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

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

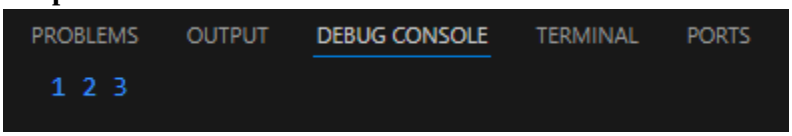
Output:



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>
```

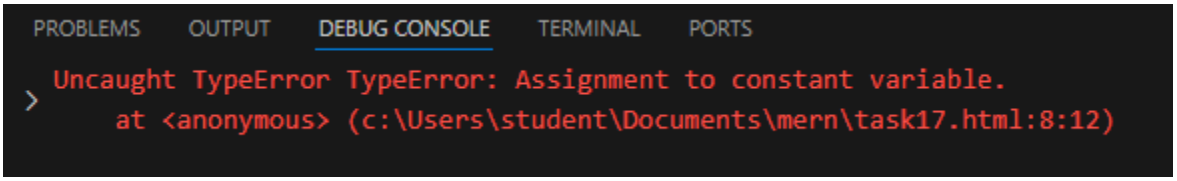
Output:



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>
```

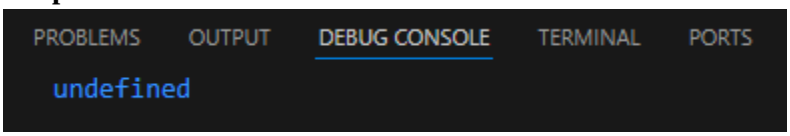
Output:



Task 18:

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

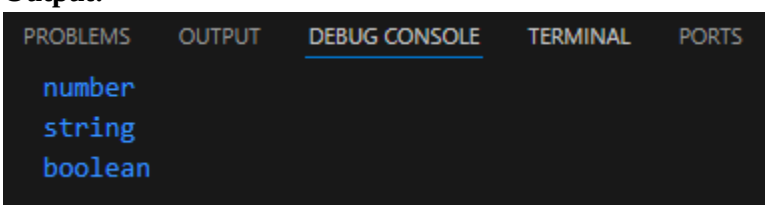
Output:



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:

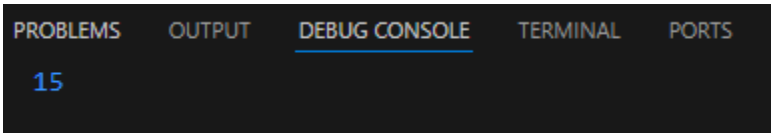


Task 20:

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

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

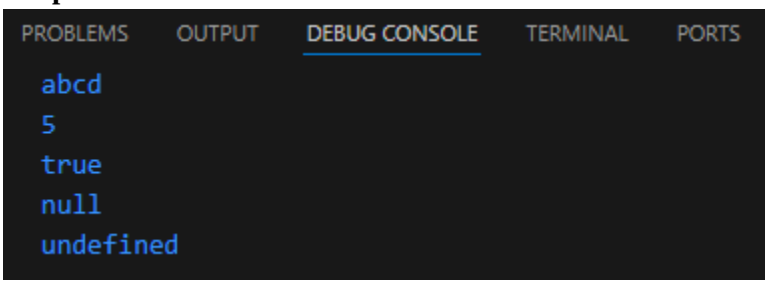
Output:



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:

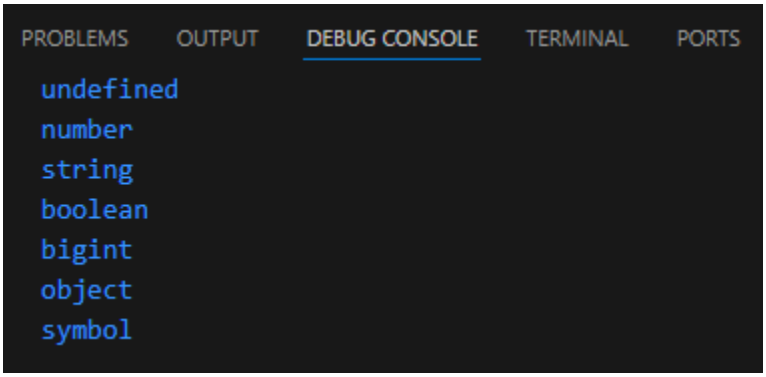


Task 22:

```
<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>
```

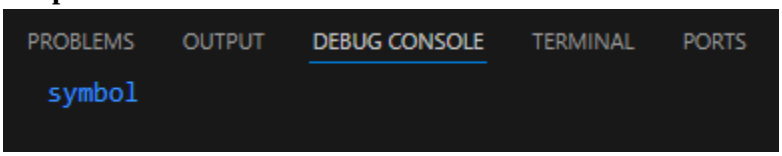
Output:



Task 23:

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

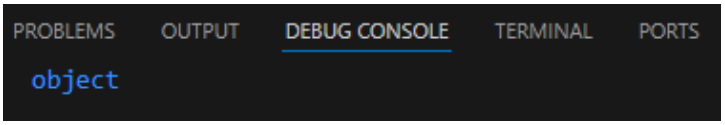
Output:



Task 24:

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

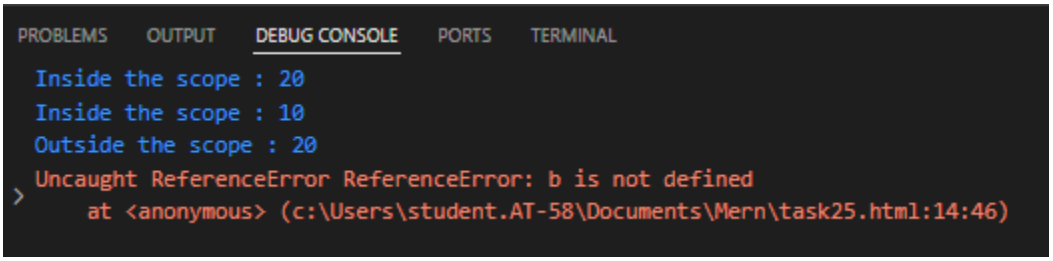
Output:



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>
```

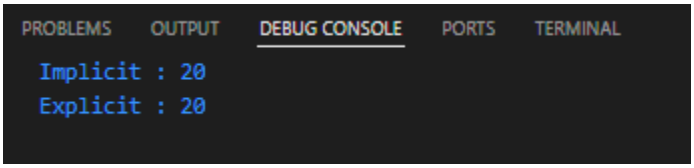
Output:



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:

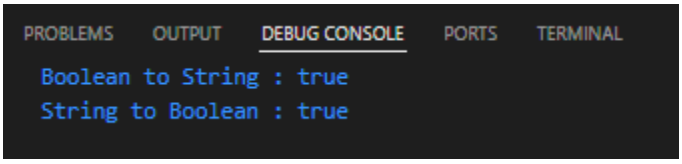


Task 27:

```
<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>
```

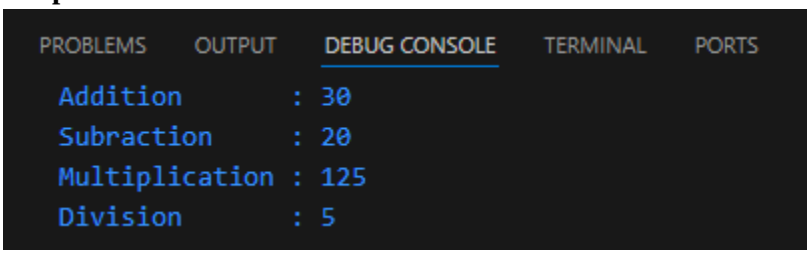
Output:



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("Subraction     : " + (a - b));
      console.log("Multiplication : " + (a * b));
      console.log("Division       : " + (a / b));
   </script>
</body>
</html>
```

Output:

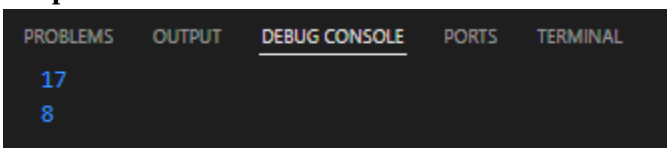


Task 29:

```
<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>
```

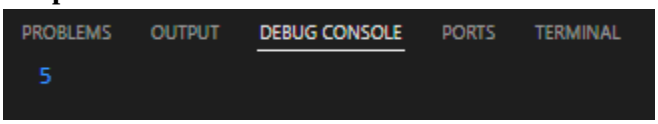
Output:



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>
```

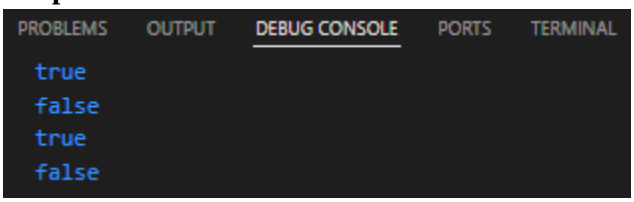
Output:



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>
```

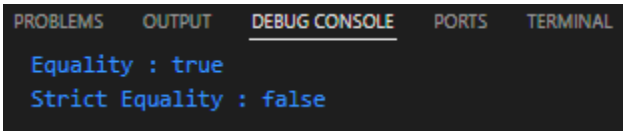
Output:



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>
```

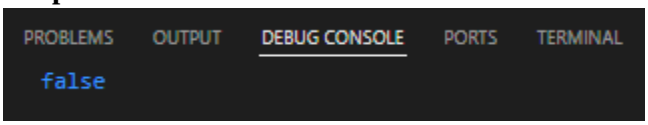
Output:



Task 33:

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

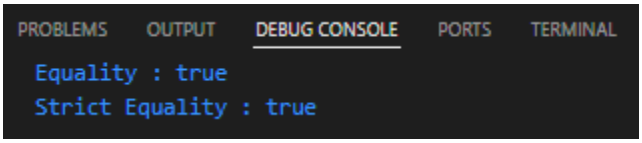
Output:



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>
```

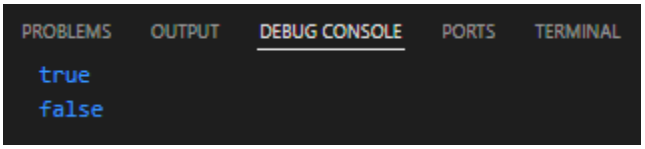
Output:



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:



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>
```

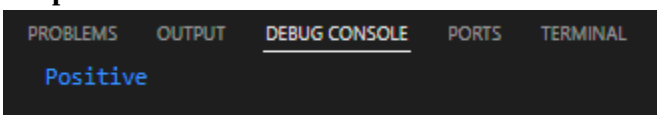
Output:

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>
```

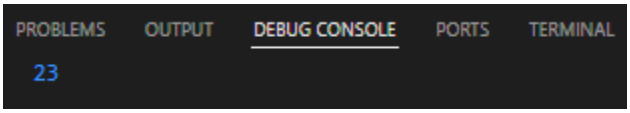
Output:



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:

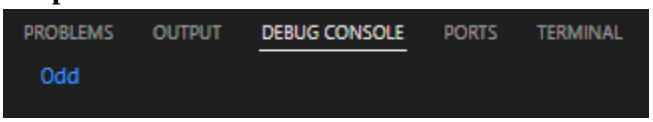


Task 39:

```
<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:

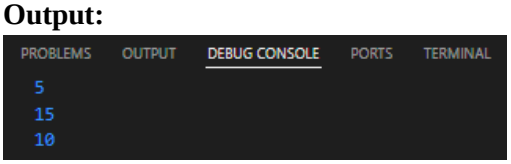
```
<html>
<head>
   <title>validation</title>
</head>
<body>
   <script>
      var a = 20;
      var b;
      (a % 2 == 0) ? b = a : b = 5;
      console.log(b);
   </script>
</body>
</html>
```

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>
```

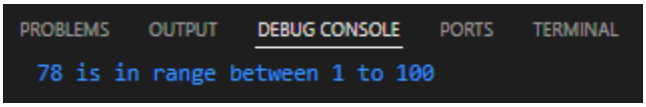
Output:



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>
```

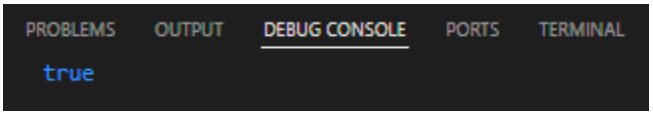
Output:



Task 43:

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

Output:

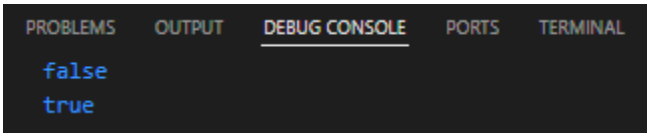


Task 44:

```
<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);
      }
```

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

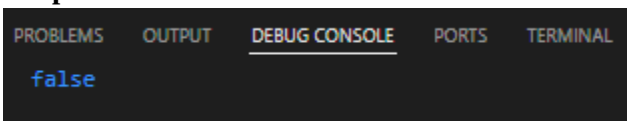
Output:



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);
```

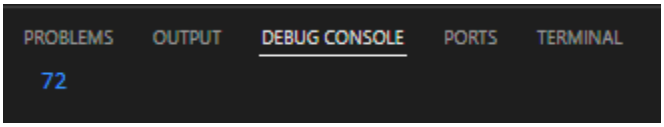
```
    </script>
</body>
</html>
```

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>
```

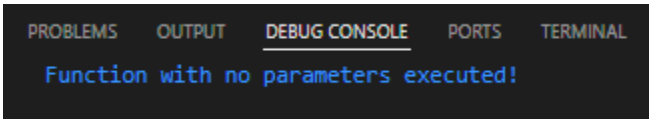
Output:



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:

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: