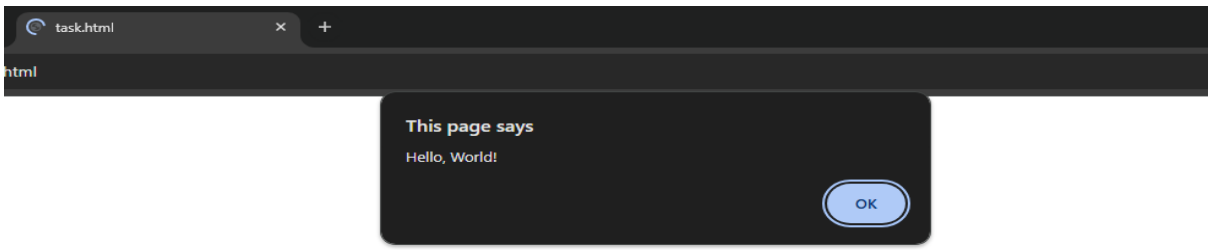
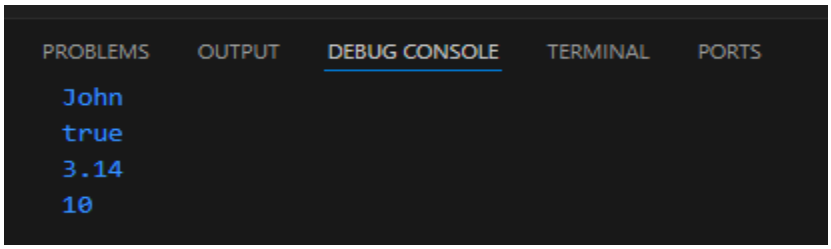
Task 1:

```
<!DOCTYPE html>
<html>
   <head>
      <meta charset = "UTF-8">
      <meta name = "viewport" content = "width=device-width">
   </head>
   <body>
      <script>
         alert("Hello, World!");
      </script>
   </body>
</html>
```



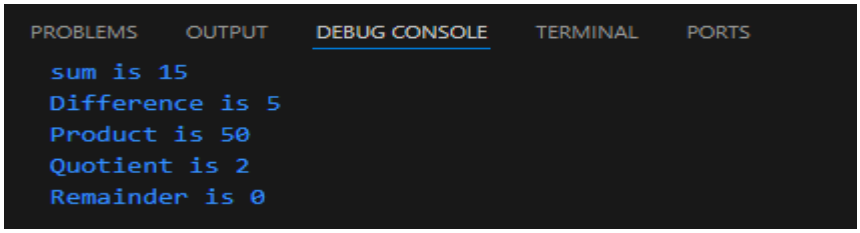
Task 2:

```
<!DOCTYPE html>
<html>
   <head>
      <meta charset = "UTF-8">
      <meta name = "viewport" content = "width=device-width">
   </head>
   <body>
      <script>
         var Name = "John";
         let x = 10;
         let Result = true;
         const PI = 3.14;
         console.log(Name);
         console.log(Result);
         console.log(PI);
         console.log(x);
      </script>
   </body>
</html>
```



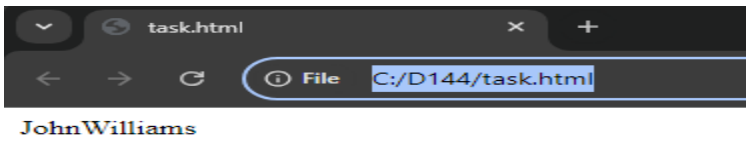
Task 3:

```
<!DOCTYPE html>
<html>
   <head>
      <meta charset = "UTF-8">
      <meta name = "viewport" content = "width=device-width">
   </head>
   <body>
      <script>
         let a = 10;
         let b = 5;
         console.log("sum is " +(a+b));
         console.log("Difference is "+(a-b));
         console.log("Product is "+(a*b));
         console.log("Quotient is "+(a/b));
         console.log("Remainder is "+(a%b));
      </script>
   </body>
</html>
```



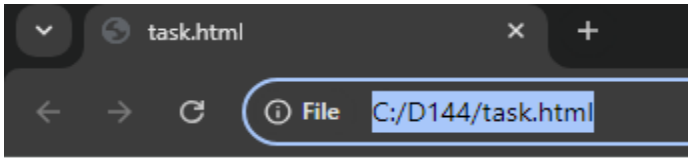
Task 4:

```
<!DOCTYPE html>
<html>
   <head>
      <meta charset = "UTF-8">
      <meta name = "viewport" content = "width=device-width">
   </head>
   <body>
      <script>
         var Fname = "John";
         var Lname = "Williams";
         document.write(Fname+Lname);
      </script>
</body></html>
```



Task 5:

```
<!DOCTYPE html>
<html>
   <head>
      <meta charset = "UTF-8">
      <meta name = "viewport" content = "width=device-width">
   </head>
   <body>
      <script>
         var Fname = "John";
         let Result = true;
         let x = 10;
         let y ;
         document.write(typeof Fname +"<br>");
         document.write(typeof Result +"<br>");
         document.write(typeof x +"<br>");
         document.write(typeof y);
      </script>
   </body>
</html>
```

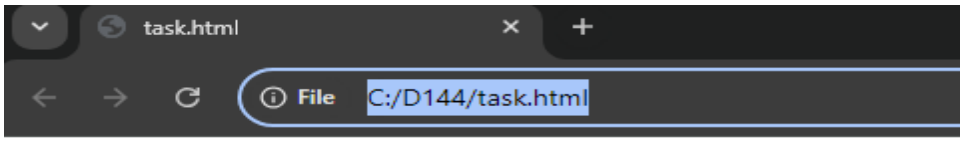


string
boolean
number
undefined

Task 6:

```
<!DOCTYPE html>
<html>
   <head>
      <meta charset = "UTF-8">
      <meta name = "viewport" content = "width=device-width">
   </head>
   <body>
      <script>
         // var Fname = "John";
         /*let Result = true;
         let x = 10;
         let y ;
         document.write(typeof Fname +"<br>");
         document.write(typeof Result +"<br>");
         document.write(typeof x +"<br>");
```

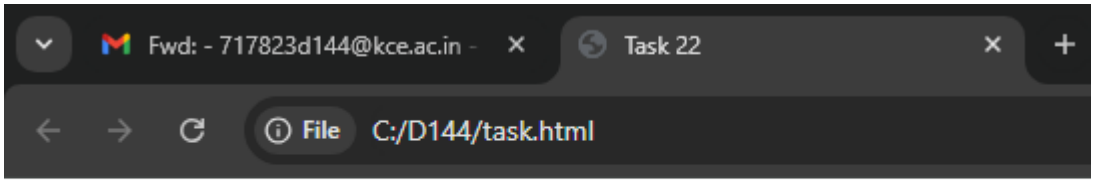
```
        document.write(typeof y);*/
        document.write("The diff between single and multi-line comments:" +"<br>");
        document.write("Multiline comment: This is used for commenting multiple lines of
code"+"<br>");
        document.write("Syntax: /* comment */"+"<br>");
        document.write("Single line comment: This is used for commenting single line of
code"+"<br>");
        document.write("Syntax: // comment "+"<br>");
      </script>
  </body>
</html>
```



The diff between single and multi-line comments:
Multiline comment: This is used for commenting multiple lines of code
Syntax: /* comment */
Single line comment: This is used for commenting single line of code
Syntax: // comment

Task 7:

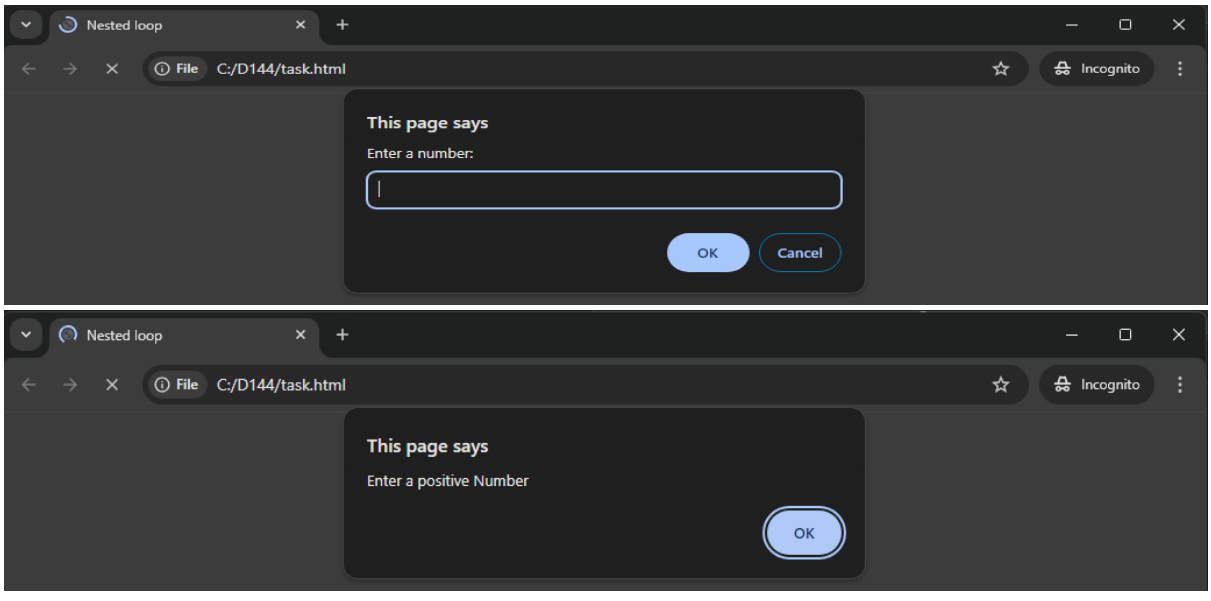
```
<!DOCTYPE html>
<html>
  <head>
    <meta charset = "UTF-8">
    <meta name = "viewport" content = "width=device-width">
    <title>Task 22</title>
  </head>
  <body>
    <script>
      let a = 5;
      let b = 10;
      let Result1 = a + b;
      let Result2 = a - b
      document.write("Sum is With semicolon Statement: "+Result1+"<br>");
      document.write("Difference is Without semicolon Statement: "+Result2+"<br>");
    </script>
  </body>
</html>
```



Sum is With semicolon Statement: 15
Difference is Without semicolon Statement: -5

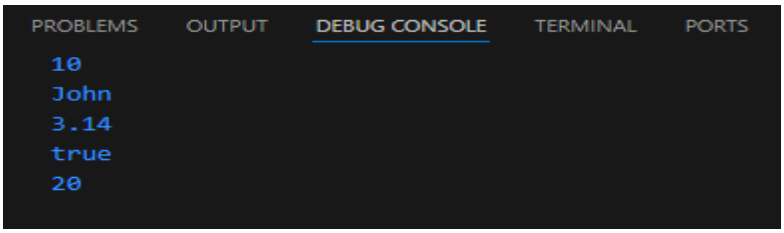
Task 8:

```
<!DOCTYPE html>
<html>
   <head>
      <meta charset = "UTF-8">
      <meta name = "viewport" content = "width=device-width">
      <title>Nested loop</title>
   </head>
   <body>
      <script>
   let Num = parseInt(prompt("Enter a number: "));
   if(Num == NaN)
   {
      alert("Enter a valid number");
   }
   else
   {
      if(Num < 0)
      {
         alert("Enter a positive Number");
      }
      else
      {
         alert("It is a Positive Number");
      }
   }
      </script>
   </body>
</html>
```



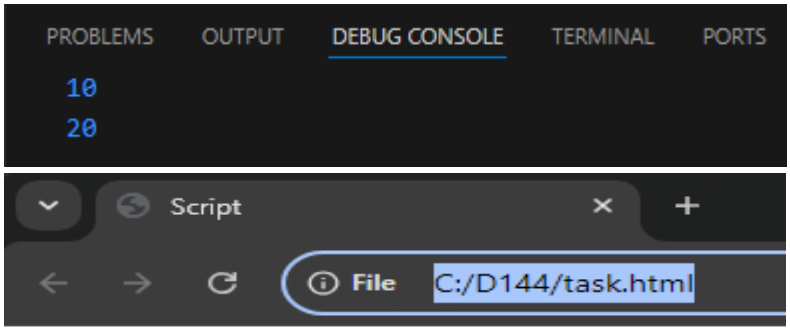
Task 9:

```
<!DOCTYPE html>
<html>
   <head>
      <meta charset = "UTF-8">
      <meta name = "viewport" content = "width=device-width">
      <title>Nested loop</title>
   </head>
   <body>
      <script>
         let Num1 = 10, Num2 = 20; var Name = "John"; const PI = 3.14; let Result = true;
         console.log(Num1);
         console.log(Name);
         console.log(PI);
         console.log(Result);
         console.log(Num2);</script>
   </body>
 </html>
```



Task 10:

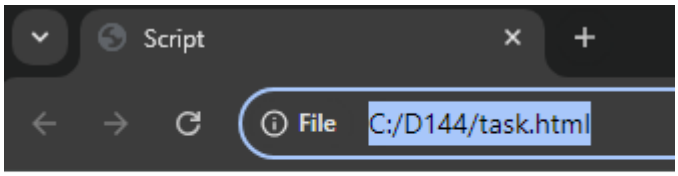
```
<!DOCTYPE html>
<script>
   let Num1 = 10, Num2 = 20;
   document.write(Num1 +"<br>");
   document.write(Num2 +"<br>");
</script>
<html>
   <head>
      <meta charset = "UTF-8">
      <meta name = "viewport" content = "width=device-width">
      <title>Script</title>
   </head>
   <body>
   </body>
</html>
<script>
   var Num3 = 10, Num4 = 20;
   console.log(Num1);
   console.log(Num2);
</script>
```



10
20

Task 11:

```
<!DOCTYPE html>
<html>
   <head>
      <meta charset = "UTF-8">
      <meta name = "viewport" content = "width=device-width">
      <title>Script</title>
   </head>
   <body>
      <script>
   Num1 = 10, Num2 = 20;
   document.write(Num1 +"<br>");
   document.write(Num2 +"<br>");
</script>
   </body>
</html>
```

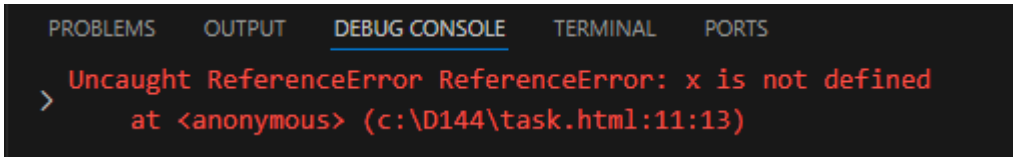


10
20

Task 12:

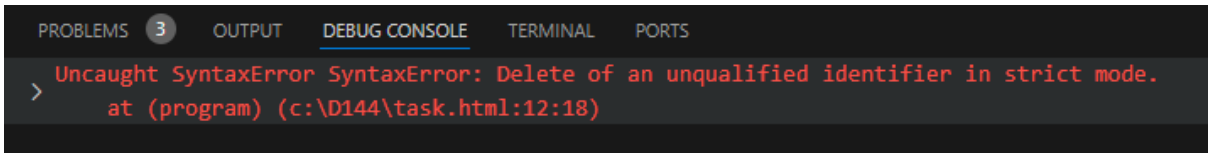
```
<!DOCTYPE html>
<html>
   <head>
      <meta charset = "UTF-8">
      <meta name = "viewport" content = "width=device-width">
      <title>Task 12</title>
   </head>
   <body>
      <script>
```

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



Task 13:

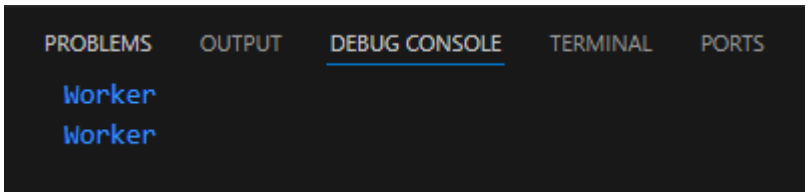
```
<!DOCTYPE html>
<html>
   <head>
      <meta charset = "UTF-8">
      <meta name = "viewport" content = "width=device-width">
      <title>Task 13</title>
   </head>
   <body>
      <script>
        "use strict";
        let x = 5;
        delete x;
        "use strict";
        function a(x1,x2){
        }
        delete a;
        "use strict";
        function b(y1,y2){
        }
        delete x1;
      </script>
   </body>
</html>
```



Task 14:

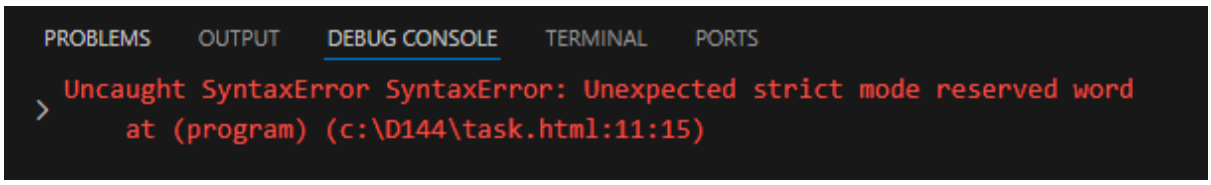
```
<!DOCTYPE html>
<html>
   <head>
      <meta charset = "UTF-8">
```

```
    <meta name = "viewport" content = "width=device-width">
    <title>Task 14</title>
  </head>
  <body>
    <script>
       a = "Worker";
       console.log(a);
     "use strict";
     a = "Worker";
     console.log(a);
    </script>
  </body>
</html>
```



Task 15:

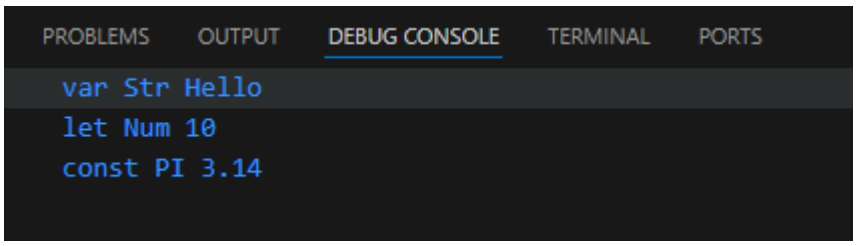
```
<!DOCTYPE html>
<html>
  <head>
    <meta charset = "UTF-8">
    <meta name = "viewport" content = "width=device-width">
    <title>Task 15</title>
  </head>
  <body>
    <script>
      "use strict";
      var let = "Mommeyyy";
      console.log(let);
    </script>
  </body>
</html>
```



Task 16:

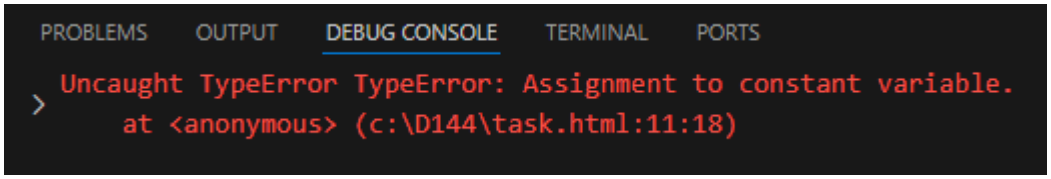
```
<!DOCTYPE html>
<html>
  <head>
    <meta charset = "UTF-8">
```

```
    <meta name = "viewport" content = "width=device-width">
    <title>Task 22</title>
  </head>
  <body>
    <script>
      var Str = "Hello";
      let Num = 10;
      const PI = 3.14;
      console.log("var Str "+Str);
      console.log("let Num "+Num);
      console.log("const PI "+PI);
    </script>
  </body>
</html>
```



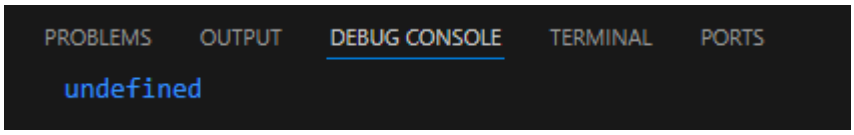
Task 17:

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset = "UTF-8">
    <meta name = "viewport" content = "width=device-width">
    <title>Script</title>
  </head>
  <body>
    <script>
      const Num1 = 10;
      Num1 = 20;
      console.log(Num1);
    </script>
  </body>
</html>
```



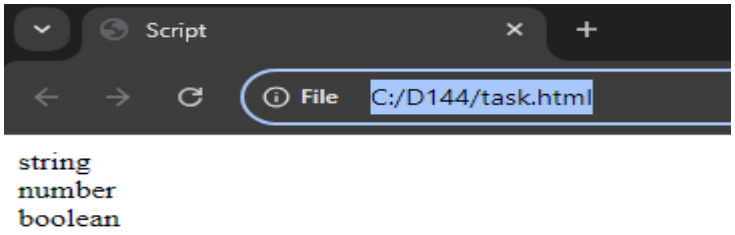
Task 18:

```
<!DOCTYPE html>
<html>
   <head>
      <meta charset = "UTF-8">
      <meta name = "viewport" content = "width=device-width">
      <title>Script</title>
   </head>
   <body>
      <script>
         let Num1;
         console.log(Num1);
      </script>
   </body>
</html>
```



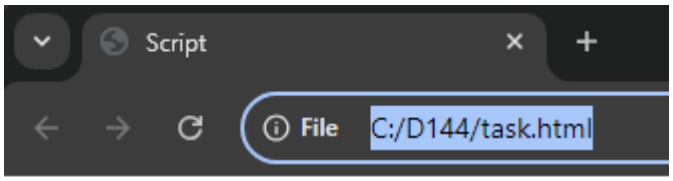
Task 19:

```
<!DOCTYPE html>
<html>
   <head>
      <meta charset = "UTF-8">
      <meta name = "viewport" content = "width=device-width">
      <title>Script</title>
   </head>
   <body>
      <script>
         var Cat = "Mini";
         document.write(typeof(Cat)+"<br>");
         var Cat = 10;
         document.write(typeof(Cat)+"<br>");
         var Cat = true;
         document.write(typeof(Cat)+"<br>");
      </script>
   </body>
</html>
```



Task 20:

```
<!DOCTYPE html>
<html>
   <head>
      <meta charset = "UTF-8">
      <meta name = "viewport" content = "width=device-width">
      <title>Script</title>
   </head>
   <body>
      <script>
         var Cat = "Mini";
         document.write("Old name: "+Cat+"<br>");
         var Cat = "White";
         document.write("New name: "+Cat+"<br>");
      </script>
   </body>
</html>
```

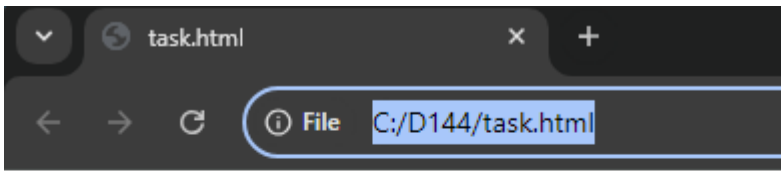


Old name: Mini
New name: White

Task 21:

```
<!DOCTYPE html>
<html>
   <head>
      <meta charset = "UTF-8">
      <meta name = "viewport" content = "width=device-width">
   </head>
   <body>
      <script>
         var Str = "Hello";
         let Num = 10;
         const PI = 3.14;
         let Result = true;
         let x ;
         let y = null;
         let OB = {
            name : "John",
            Dept : "CSE"
         };
         document.write("String: "+Str+"<br>");
```

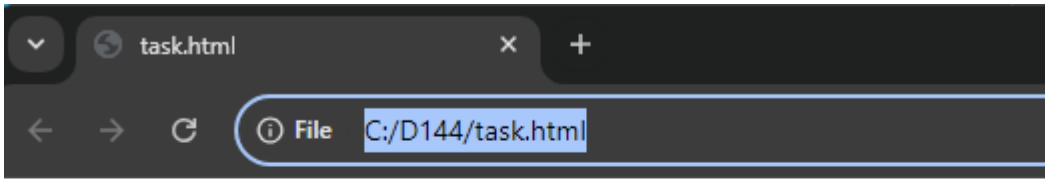
```
        document.write("Number: "+Num+"<br>");
        document.write("Boolean:  "+Result+"<br>");
        document.write("Name: "+OB.name+"<br>");
        document.write("Dept: "+OB.Dept+"<br>");
        document.write(" "+x+"<br>");
        document.write(" "+y+"<br>");

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



String: Hello
Number: 10
Boolean: true
Name: John
Dept: CSE
undefined
null

Task 22:

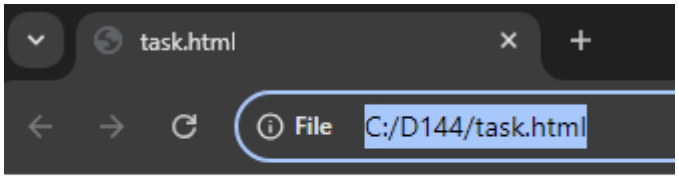
```
<!DOCTYPE html>
<html>
  <head>
    <meta charset = "UTF-8">
    <meta name = "viewport" content = "width=device-width">
  </head>
  <body>
    <script>
      var Str = "Hello";
      let Num = 10;
      const PI = 3.14;
      let Result = true;
      let x ;
      let OB = {
        name : "John",
        Dept : "CSE"
      };
      document.write("Type of "+Str+ " is " +typeof(Str)+"<br>");
      document.write("Type of  "+Num+" is " +typeof(Num)+"<br>");
      document.write("Type of   "+Result+" is " +typeof(Result)+"<br>");
      document.write("Type of OB"+" is " +typeof(OB)+"<br>");
      document.write("Type of x"+" is " +typeof(x)+"<br>");
    </script>
  </body></html>
```



Type of Hello is string
Type of 10 is number
Type of true is boolean
Type of OB is object
Type of x is undefined

Task 23:

```
<!DOCTYPE html>
<html>
   <head>
      <meta charset = "UTF-8">
      <meta name = "viewport" content = "width=device-width">
   </head>
   <body>
      <script>
         const Str = Symbol("Hello");
         document.write("Type of Str is: "+typeof(Str));
      </script>
   </body>
</html>
```

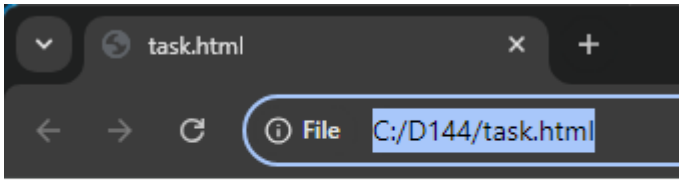


Type of Str is: symbol

Task 24:

```
<!DOCTYPE html>
<html>
   <head>
      <meta charset = "UTF-8">
      <meta name = "viewport" content = "width=device-width">
   </head>
   <body>
      <script>
         const Str = null;
         document.write("Type of Str is: "+typeof(Str));
      </script>
```

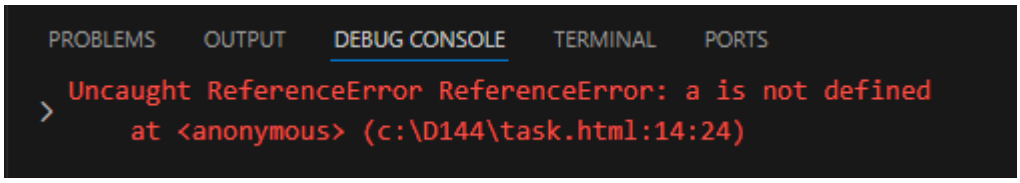
```
    </body>
</html>
```



Type of Str is: object

Task 25:

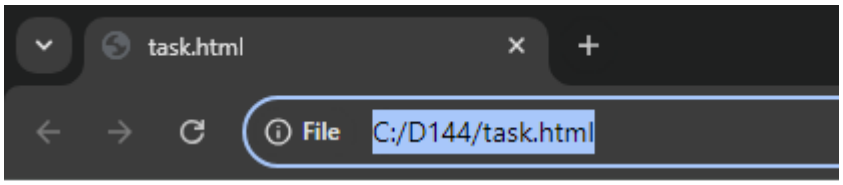
```
<!DOCTYPE html>
<html>
    <head>
        <meta charset = "UTF-8">
        <meta name = "viewport" content = "width=device-width">
    </head>
    <body>
        <script>
          function varscope(){
           if(true){
              var a = "Hello";
           }
          }
          console.log(a);
          varscope();
          function letscope(){
           if(true){
              var b = "World";
           }
          }
          console.log(b);
          letscope();
        </script>
    </body>
</html>
```



Task 26:

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

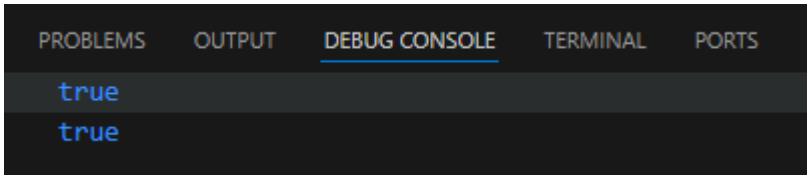
```
        <meta name = "viewport" content = "width=device-width">
    </head>
    <body>
        <script>
         let a =+ "10";
         document.write("Implicit Conversion: "+a+"<br>");
         let b = "10";
         document.write("Explicit Conversion: "+Number(b));
        </script>
    </body>
</html>
```



Implicit Conversion: 10
Explicit Conversion: 10

Task 27:

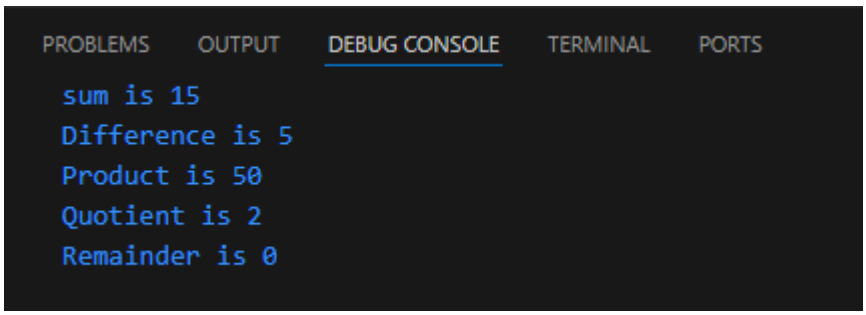
```
<!DOCTYPE html>
<html>
    <head>
        <meta charset = "UTF-8">
        <meta name = "viewport" content = "width=device-width">
    </head>
    <body>
        <script>
         var Str1 = true;
         var bool = "Helloo";
         console.log(String(Str1));
         console.log(Boolean(bool));
        </script>
    </body>
</html>
```



Task 28:

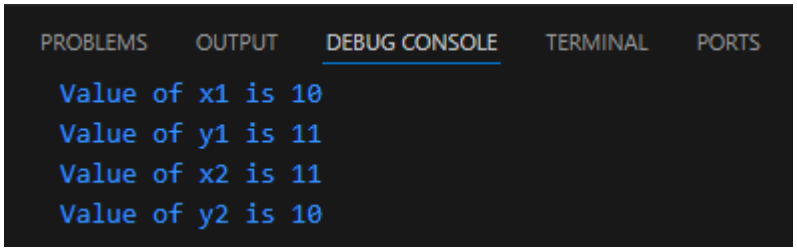
```
<!DOCTYPE html>
<html>
    <head>
        <meta charset = "UTF-8">
```

```
    <meta name = "viewport" content = "width=device-width">
  </head>
  <body>
    <script>
      let a = 10;
      let b = 5;
      console.log("sum is " +(a+b));
      console.log("Difference is "+(a-b));
      console.log("Product is "+(a*b));
      console.log("Quotient is "+(a/b));
      console.log("Remainder is "+(a%b));
    </script>
  </body>
</html>
```



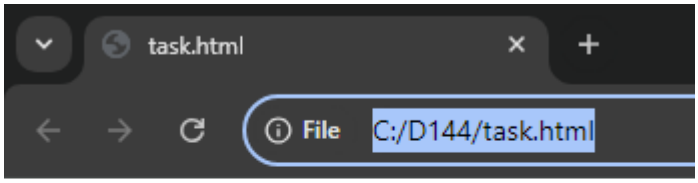
Task 29:

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset = "UTF-8">
    <meta name = "viewport" content = "width=device-width">
  </head>
  <body>
    <script>
      let a = 10;
      x1 = a++;
      y1 = a--;
      x2 = ++a;
      y2 = --a;
      console.log("Value of x1 is "+x1);
      console.log("Value of y1 is "+y1);
      console.log("Value of x2 is "+x2);
      console.log("Value of y2 is "+y2);
    </script>
  </body>
</html>
```



Task 30:

```
<!DOCTYPE html>
<html>
   <head>
      <meta charset = "UTF-8">
      <meta name = "viewport" content = "width=device-width">
   </head>
   <body>
      <script>
         let a = 10, b = 40, c = 25, d = 44;
         exp1 = a + b - c *d;
         exp2 = d - c * a + b;
         exp3 = c *a + b ^ ++a;
         exp4 = b / c - a * a;
         document.writeln("Value of Exp1 is "+exp1+"<br>");
         document.writeln("Value of Exp2 is "+exp2+"<br>");
         document.writeln("Value of Exp3 is "+exp3+"<br>");
         document.writeln("Value of Exp4 is "+exp4+"<br>");
      </script>
   </body>
</html>
```

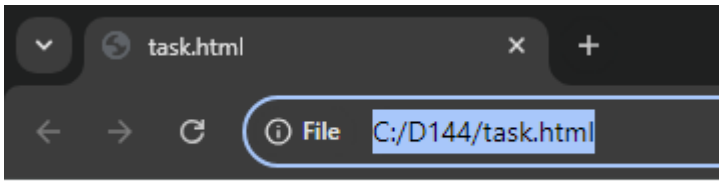


Value of Exp1 is -1050
Value of Exp2 is -166
Value of Exp3 is 297
Value of Exp4 is -119.4

Task 31:

```
<!DOCTYPE html>
<html>
   <head>
      <meta charset = "UTF-8">
      <meta name = "viewport" content = "width=device-width">
   </head>
   <body>
```

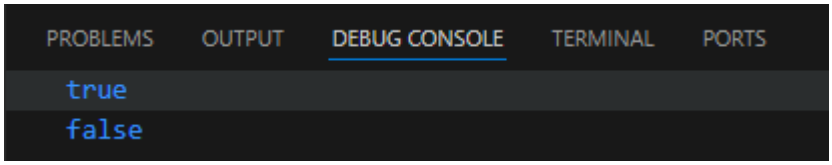
```
        <script>
            let a = 10, b = 40, c = 25, d = 44;
            document.writeln("Value of Exp1 is "+(a>b)+"<br>");
            document.writeln("Value of Exp2 is "+(c<d)+"<br>");
            document.writeln("Value of Exp3 is "+(a<=b)+"<br>");
            document.writeln("Value of Exp4 is "+(b>=d)+"<br>");
            document.writeln("Value of Exp4 is "+(a==d)+"<br>");
            document.writeln("Value of Exp4 is "+(c!=a)+"<br>");
        </script>
    </body>
</html>
```



Value of Exp1 is false
Value of Exp2 is true
Value of Exp3 is true
Value of Exp4 is false
Value of Exp4 is false
Value of Exp4 is true

Task 32:

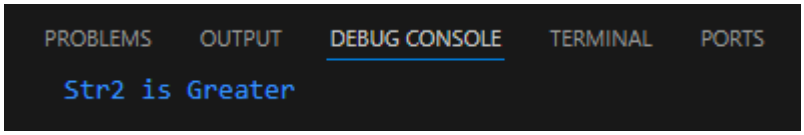
```
<!DOCTYPE html>
<html>
    <head>
        <meta charset = "UTF-8">
        <meta name = "viewport" content = "width=device-width">
    </head>
    <body>
        <script>
            let a = 40, b = "40";
            console.log(a == b);
            console.log(a === b);
        </script>
    </body>
</html>
```



Task 33:

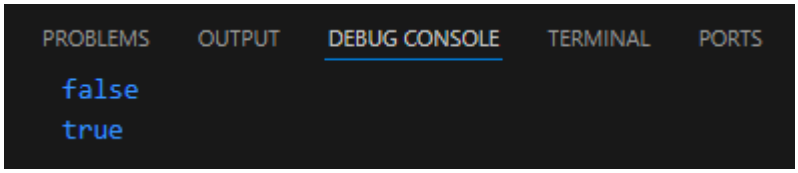
```
<!DOCTYPE html>
<html>
```

```
    <head>
        <meta charset = "UTF-8">
        <meta name = "viewport" content = "width=device-width">
    </head>
    <body>
        <script>
            var Str1 = "Hello";
            var Str2 = "Hello World";
            var Result = Str1.localeCompare(Str2);
            if(Result < 0){
                console.log("Str2 is Greater");
            }else if(Result == 0){
                console.log("Two Strings are equal");
            }else{
                console.log("Str1 is Greater");
            }
        </script>
    </body>
</html>
```



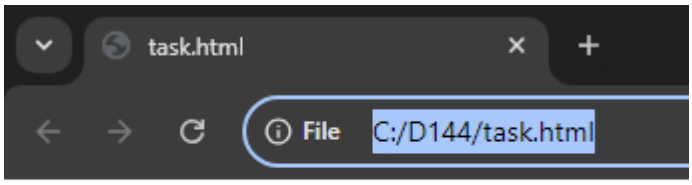
Task 34:

```
<!DOCTYPE html>
<html>
    <head>
        <meta charset = "UTF-8">
        <meta name = "viewport" content = "width=device-width">
    </head>
    <body>
        <script>
            let a = 40, b = "40";
            console.log(a != b);
            console.log(a !== b);
        </script>
    </body>
</html>
```



Task 35:

```
<!DOCTYPE html>
<html>
   <head>
      <meta charset = "UTF-8">
      <meta name = "viewport" content = "width=device-width">
   </head>
   <body>
      <script>
         let a;
         let b = null;
         document.write("Comparing using (==): "+(a == b)+"<br>");
         document.write("Comparing using (===): "+(a === b)+"<br>");
      </script>
   </body>
</html>
```



Comparing using (==): true
Comparing using (===): false