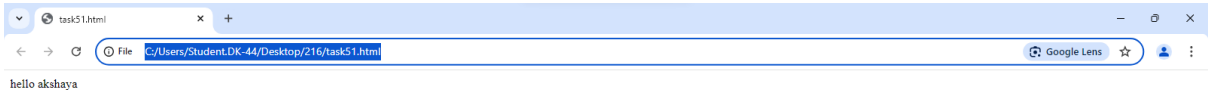
TASK 51:

```
<html>
   <body>
      <script>
         let greet=(name)=>{
          document.write( "hello " + name);
         }
         greet("akshaya");


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

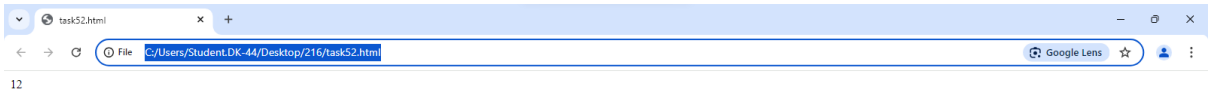
OUTPUT:



TASK 52:

```
<html>
   <body>
      <script>
         let add=(a,b)=>{
            document.write(a+b);
         }
         add(5,7);
      </script>
   </body>
</html>
```

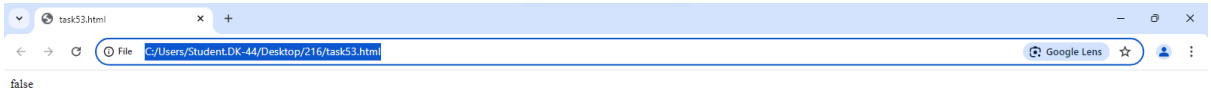
OUTPUT:



TASK 53:

```
<html>
   <body>
      <script>
         let iseven=(a)=>{
            if(a%2==0)
            document.write("true");
         else
         document.write("false");


         }
         iseven(5);
      </script>
   </body>
</html>
```

OUTPUT:

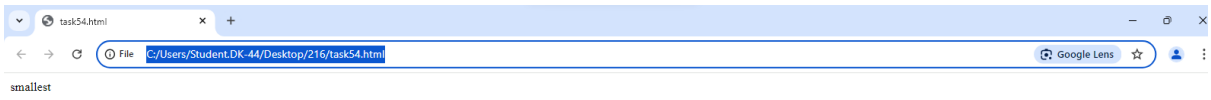


TASK 54:

```
<html>
   <body>
      <script>
         let maxValue=(a,b)=>{
            if(a>b)
```

```
        {
            document.write("largest");
        }
        else{
            document.write("smallest");
        }
        }
        maxValue(10,20);
    </script>
  </body>
</html>
```

OUTPUT:



TASK 55:

```
<html>
  <body>
    <script>
      const myObject = {
 value: 10,
 multiplyTraditional: function(factor) {
  console.log('Inside traditional function, this:', this);
  return this.value * factor;
 },
 multiplyArrow: (factor) => {
  console.log('Inside arrow function, this:', this);
  return this.value * factor;
```

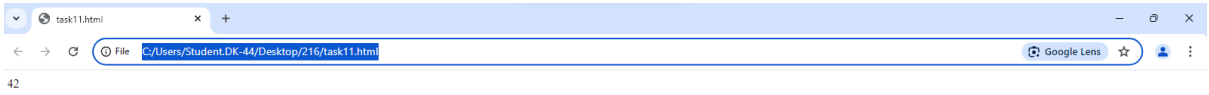
```
  }
};
console.log(myObject.multiplyTraditional(5));
console.log(myObject.multiplyArrow(5));


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

OUTPUT:

TASK 11:

```
<html>
   <body>
      <script>
         a=42;
         document.write(a);
      </script>
   </body>
</html>
```

OUTPUT:

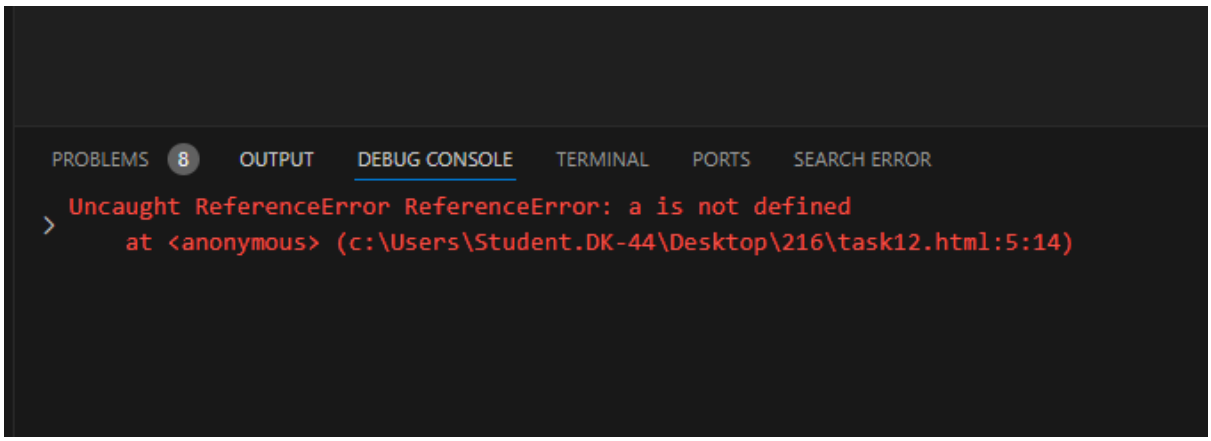


TASK 12:

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

```
    <script>
      "use strict";
      a=42;
      document.write(a);
    </script>
  </body>
</html>
```

OUTPUT:

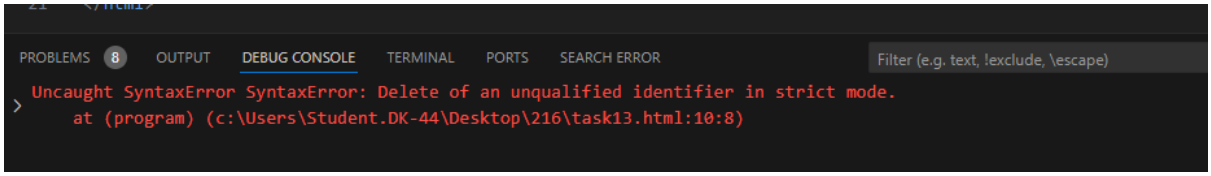


TASK 13:

```
<html>
<head>
<meta charset ="UTF-8">
<meta name:"viewport" content="width+device_width,initial-scale=1.0">
</head>
<body>
<script>
"use strict";
var name="john";
delete name;
"use strict";
function myfunction(){
```

```
return welcome guys!;

}

delete myfunction;

"use strict";

function myfunction(goodmorning)

delete myfunction;

</script>

</body>

</html>
```

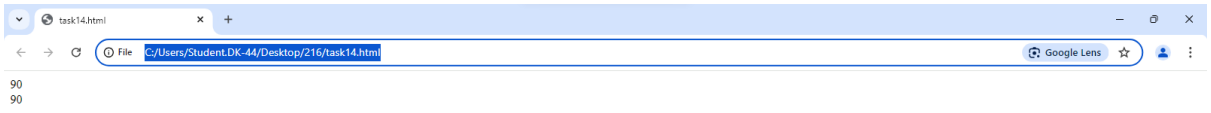
OUTPUT:



TASK 14:

```
<html>
   <body>
      <script>
         x=90;
         document.write(x+"<br>");
         "use strict";
         x=90;
         document.write(x);
      </script>
   </body>
</html>
```

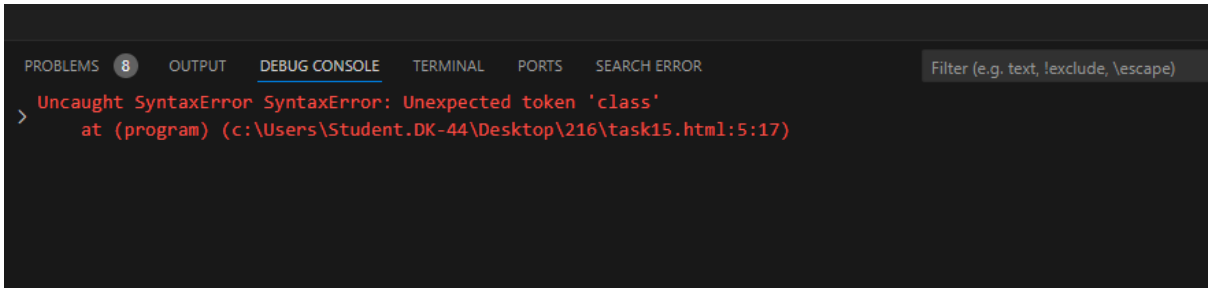
OUTPUT:



TASK 15:

```
<html>
   <body>
      <script>
         "use script";
         let class=5;
         document.write(x);
      </script>
   </body>
</html>
```

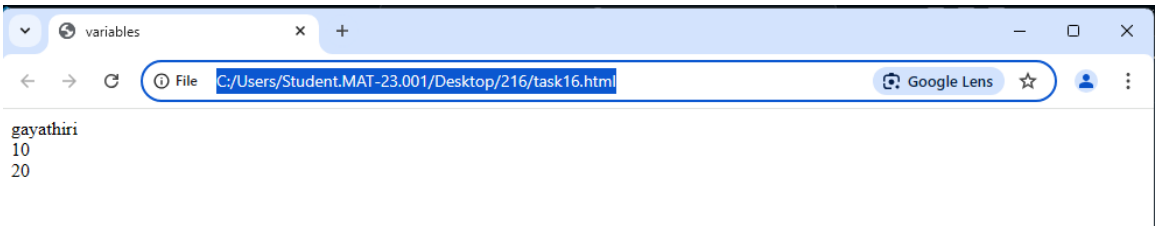
OUTPUT:



TASK 16:

```
<html>
  <head>
    <title>variables</title>
  </head>
  <body>
    <script>
      var name="gayathiri";
      let a=10;
      const b=20;
      document.write(name+"<br>");
      document.write(a+"<br>");
      document.write(b);
    </script>
  </body>
</html>
```

OUTPUT:



RESULT:

let defines a block-scoped variable that can be reassigned.

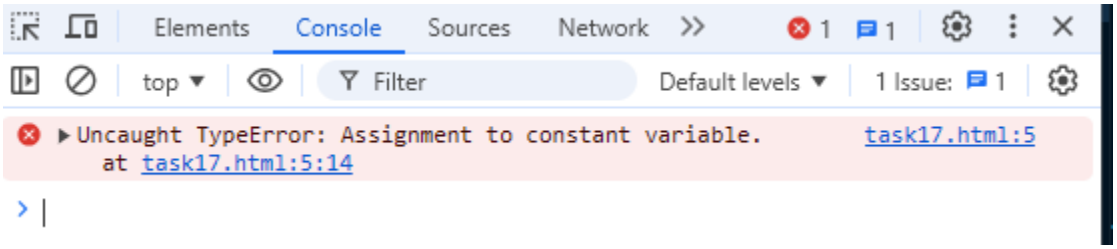
var defines a function-scoped variable that can be reassigned.

const defines a block-scoped constant that cannot be reassigned after initialization.

TASK 17:

```
<html>
  <body>
    <script>
      const a=20;
      a=30;
      document.write(a);
    </script>
  </body>
</html>
```

OUTPUT:



RESULT:

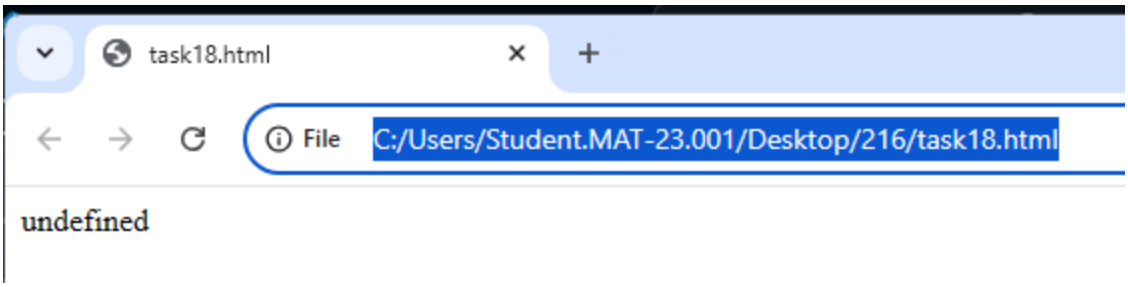
const makes a variable that cannot be reassigned once it's given a value.

If you try to change the value of a const variable, JavaScript will give an error.

TASK 18:

```
<html>
  <body>
    <script>
      let a;
      document.write(a);
    </script>
  </body>
</html>
```

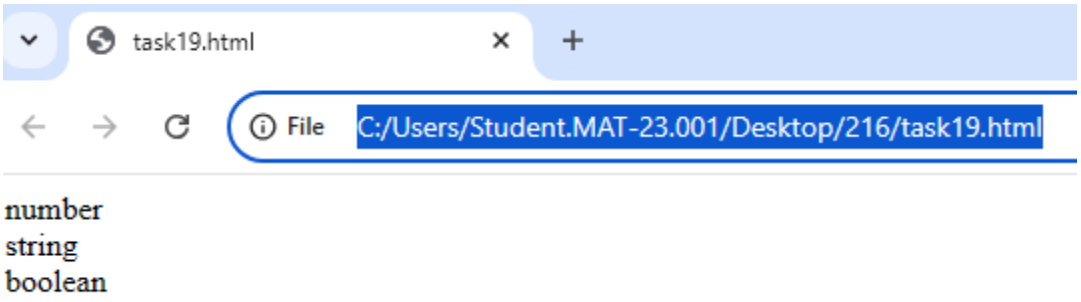
OUTPUT:



TASK 19:

```
<html>
  <body>
    <script>
      let a=20;
      var name="gayathiri";
      var boolean=true;
      document.write(typeof a+"<br>");
      document.write(typeof name+"<br>");
      document.write(typeof boolean+"<br>");
    </script>
  </body>
</html>
```

OUTPUT:

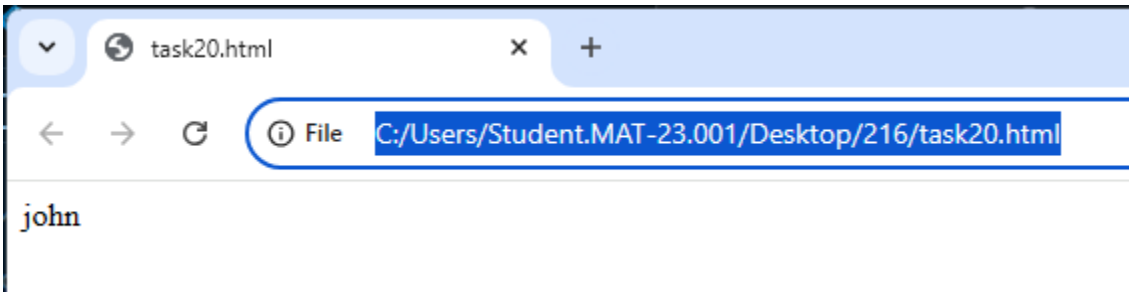


TASK 20:

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

```
    <script>
      var a="gayu";
      var a="john";
      document.write(a);
    </script>
  </body>
</html>
```

OUTPUT:



RESULT:

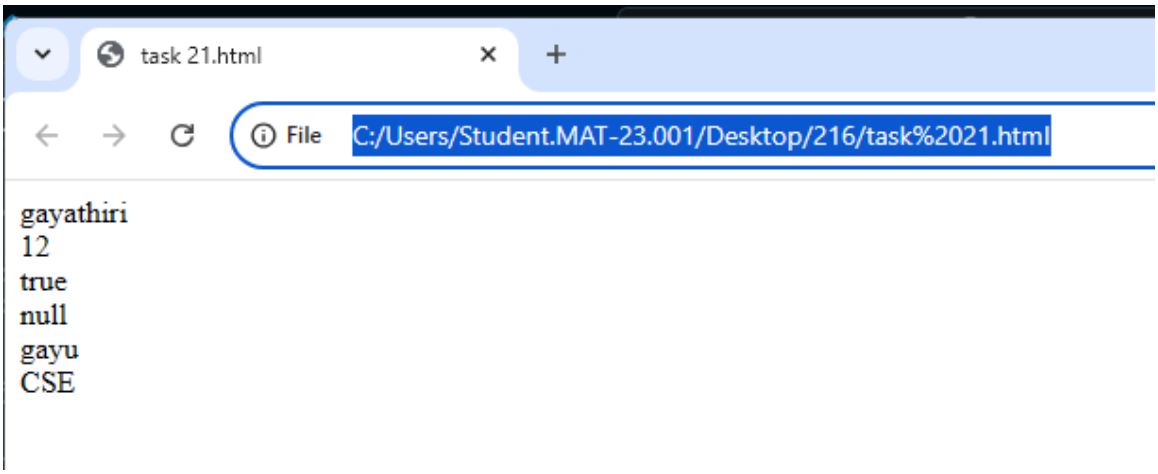
You can't literally rename the variable itself, but you can assign its value to a new variable with a different name. The original variable still exists unless you remove it or stop using it.

TASK 21:

```
<html>
  <body>
    <script>
      var name="gayathiri";
      let a=12;
      let boolean=true;
      let b=null;
      let student={
        name:"gayu",
        dept:"CSE"
      };
```

```
        document.write(name+"<br>");
        document.write(a+"<br>");
        document.write(boolean+"<br>");
        document.write(b+"<br>");
        document.write(student.name+"<br>");
        document.write(student.dept+"<br>");
    </script>
  </body>
</html>
```

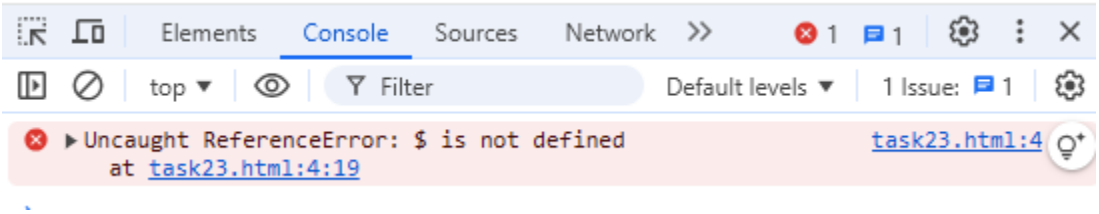
OUTPUT:



TASK 22:

```
<html>
  <body>
    <script>
      let a=$;
      document.write(a);
    </script>
  </body>
</html>
```

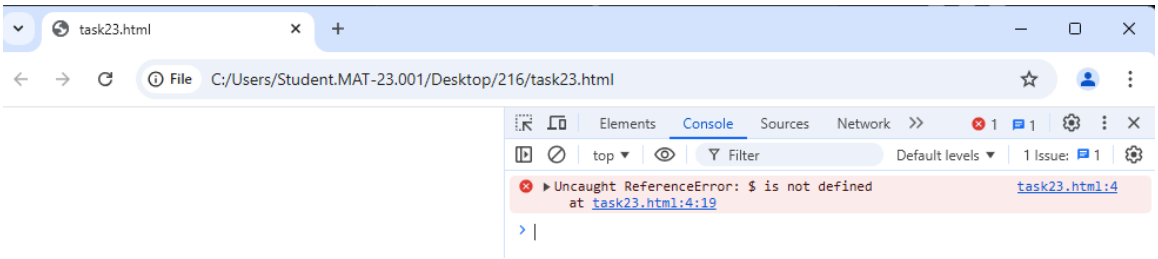
OUTPUT:



TASK 23:

```
<html>
  <body>
    <script>
      let a=$;
      document.write(a);
    </script>
  </body>
</html>
```

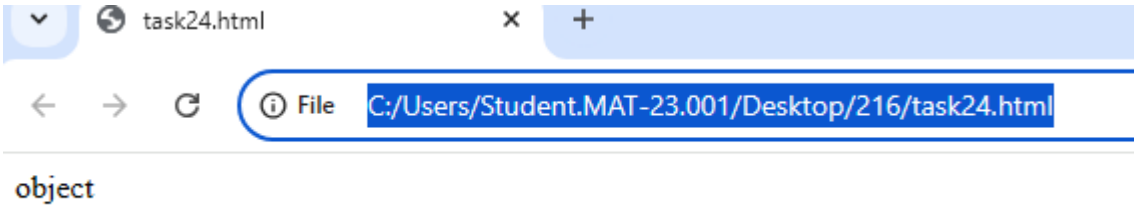
OUTPUT:



TASK 24:

```
<html>
  <body>
    <script>
      let a=null;
      document.write(typeof a);
    </script>
  </body>
</html>
```

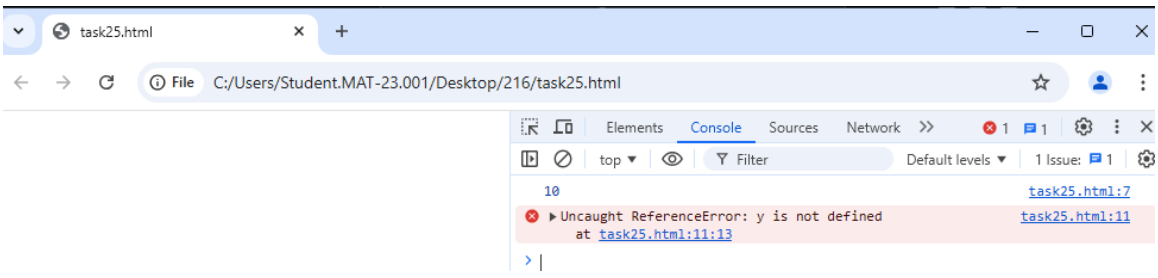
OUTPUT:



TASK 25:

```
<html>
  <body>
    <script>
  if (true) {
   var x = 10;
  }
  console.log(x);
 if (true) {
  let y = 20;
}
console.log(y);
</script>
</body>
</html>
```

OUTPUT:



RESULT:

SCOPE OF var: Variables declared with var are function-scoped. This means that they are only accessible

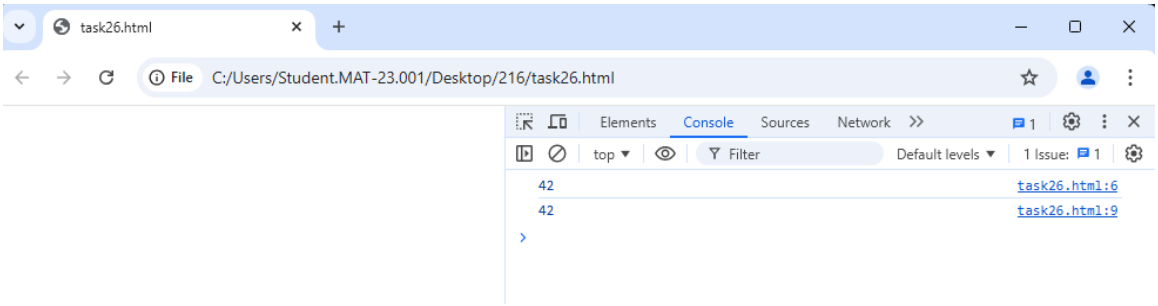
within the function they are declared in, or globally if declared outside any function.

SCOPE OF let:Scope: Variables declared with var are function-scoped. This means that they are only accessible within the function they are declared in, or globally if declared outside any function.

TASK 26:

```
<html>
  <body>
    <script>
      let str = "42";
      let num = str * 1
      console.log(num);
      let str1 = "42";
      let num1= parseInt(str1);
      console.log(num1);
    </script>
  </body>
</html>
```

OUTPUT;

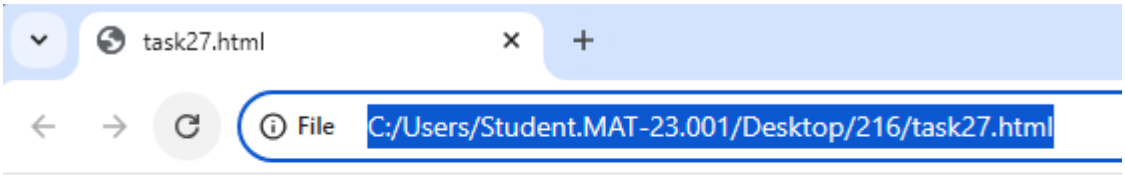


TASK 27:

```
<html>
  <body>
    <script>
      let boolean = true;
```

```
        let str = String(boolean);
        document.writeln(str + "<br>");
        document.writeln(typeof str + "<br>");
         let name = "gayathiri";
        let bool = Boolean(name);
        document.writeln(bool + "<br>");
        document.writeln( typeof bool+ "<br>");
    </script>
  </body>
</html>
```

OUTPUT:



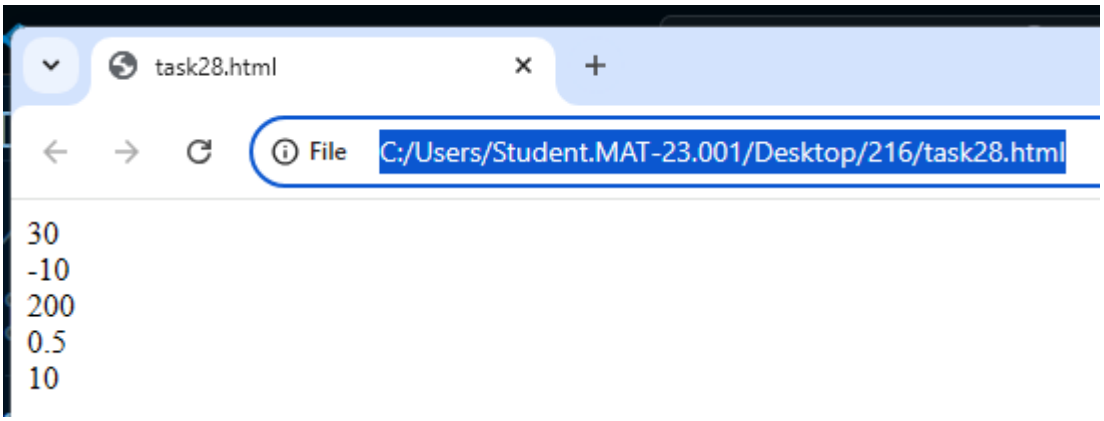
true
string
true
boolean

TASK 28:

```
<html>
  <body>
    <script>
      let a=10;
      let b=20;
      document.write(a+b+"<br>");
      document.write(a-b+"<br>");
      document.write(a*b+"<br>");
      document.write(a/b+"<br>");
      document.write(a%b+"<br>");
```

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

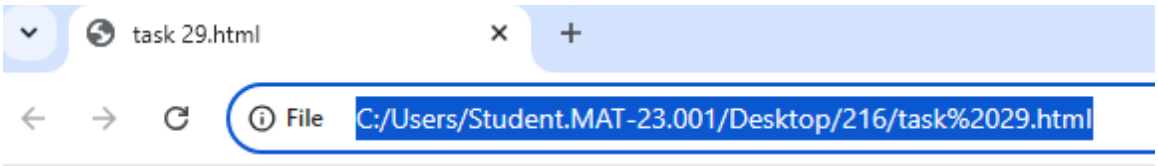
OUTPUT:



TASK 29:

```
<html>
  <body>
    <script>
      let a=5;
      document.write(a++ +"<br>");
      document.write(++a +"<br>");
      document.write(a-- +"<br>");
      document.write(--a +"<br>");
    </script>
  </body>
</html>
```

OUTPUT:

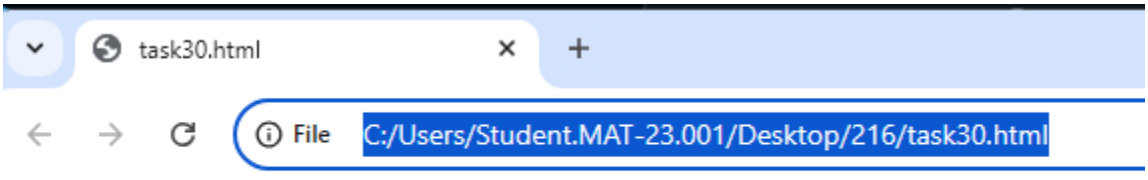


5
7
7
5

TASK 30:

```
<html>
  <body>
    <script>
      let a=5;
      let b=10;
      let c=13;
      document.write(a+b*c/a+2);
    </script>
  </body>
</html>
```

OUTPUT:

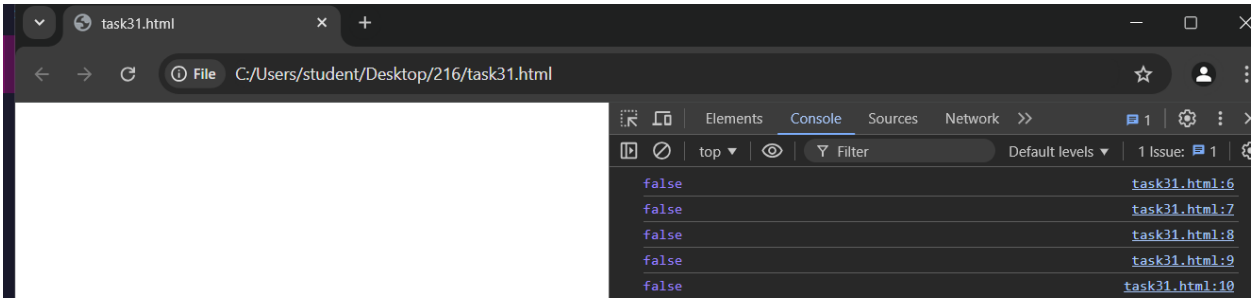


33

TASK 31:

```
<html>
 <body>
     <script>
        let a=10;
        let b=20;
        console.log(a>b +"<br>");
        console.log(a<b +"<br>");
        console.log(a>=b +"<br>");
        console.log(a<=b +"<br>");
        console.log(a==b +"<br>");
     </script>
  </body>
</html>
```

OUTPUT:

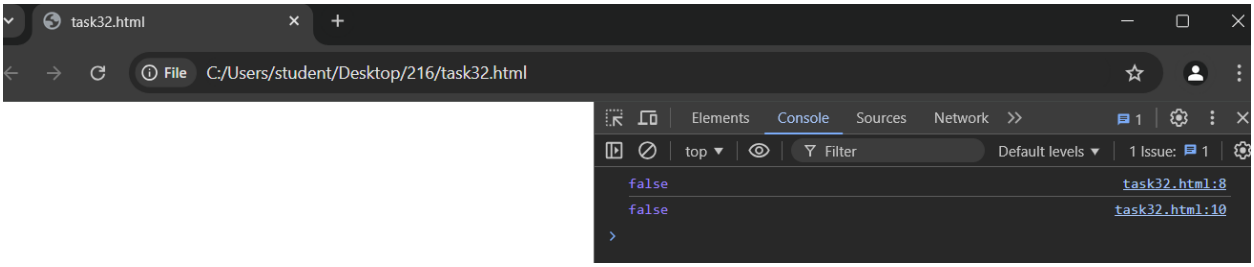


TASK 32:

```
<html>
 <body>
     <script>
        let a=10;
        let b=20;
```

```
        let c= (a==b);
        console.log(c);
        let d=(a===b);
        console.log(d);
        </script>
        </body>
    </html>
```

OUTPUT:

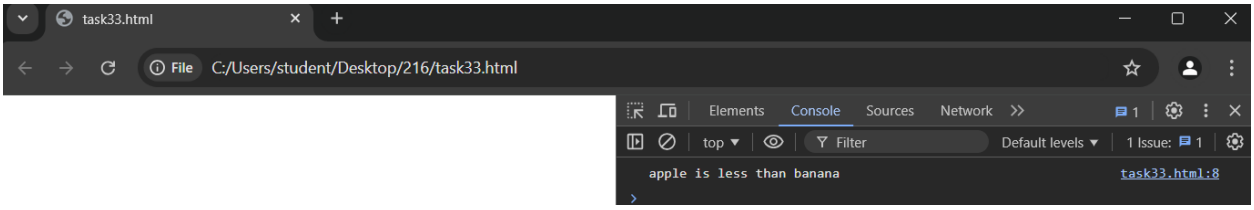


TASK 33:

```
<html>
 <body>
 <script>
 let str1 = "apple";
let str2 = "banana";
if (str1 < str2) {
    console.log(`${str1} is less than ${str2}`);
} else if (str1 > str2) {
    console.log(`${str1} is greater than ${str2}`);
} else {
```

```
    console.log(`${str1} is equal to ${str2}`);
}
      </script>
   </body>
</html>
```

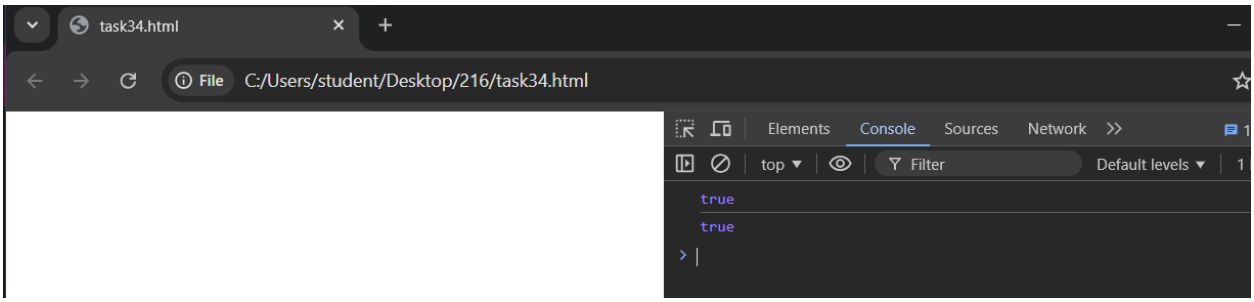
OUTPUT:



TASK 34:

```
<html>
   <body>
      <script>
         let a=30;
         let b=50;
         console.log(a!=b);
         console.log(a!==b);
      </script>
   </body>
</html>
```

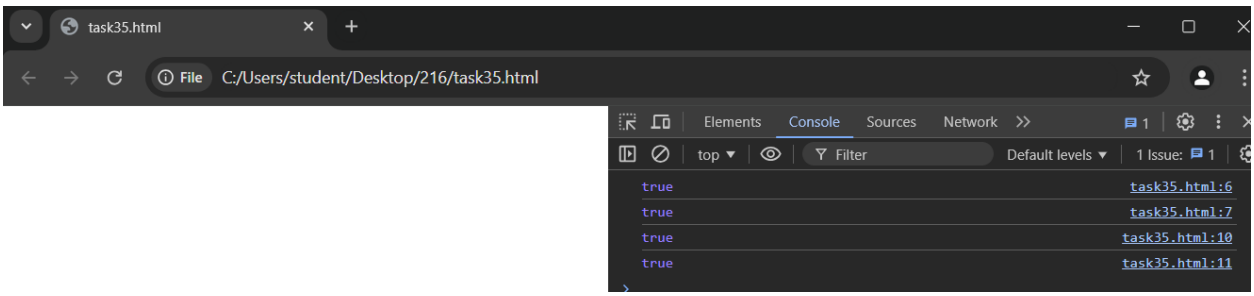
OUTPUT:



TASK 35:

```
<html>
   <body>
      <script>
         let a=null;
         let b=null;
         console.log(a==b);
         console.log(a===b);
         let c;
         let d;
         console.log(c==d);
         console.log(c===d);
      </script>
   </body>
</html>
```

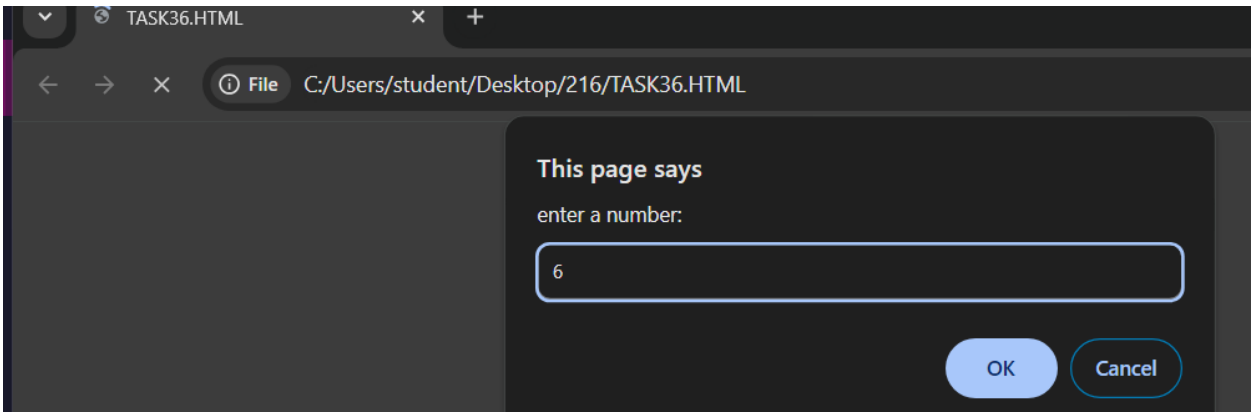
OUTPUT:

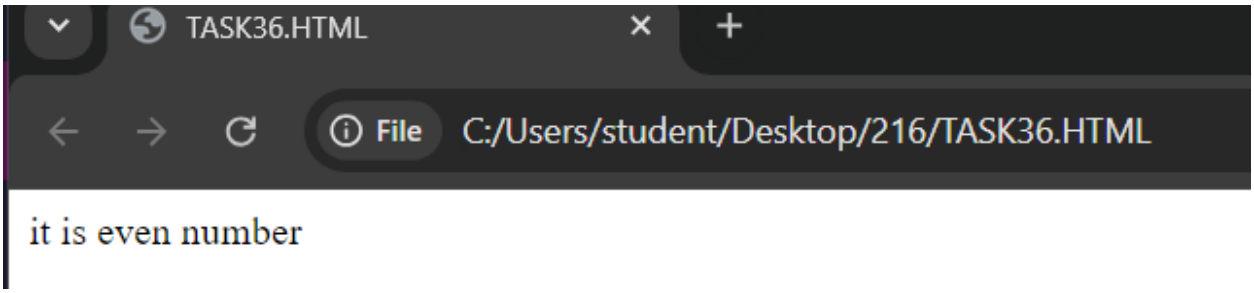


TASK 36:

```
<html>
  <body>
    <script>
      let a=prompt("enter a number:");
      if(a%2==0)
    {
      document.write("it is even number");
    }
    else{
      document.write("it is odd number");
    }
    </script>
  </body>
</html>
```

OUTPUT:

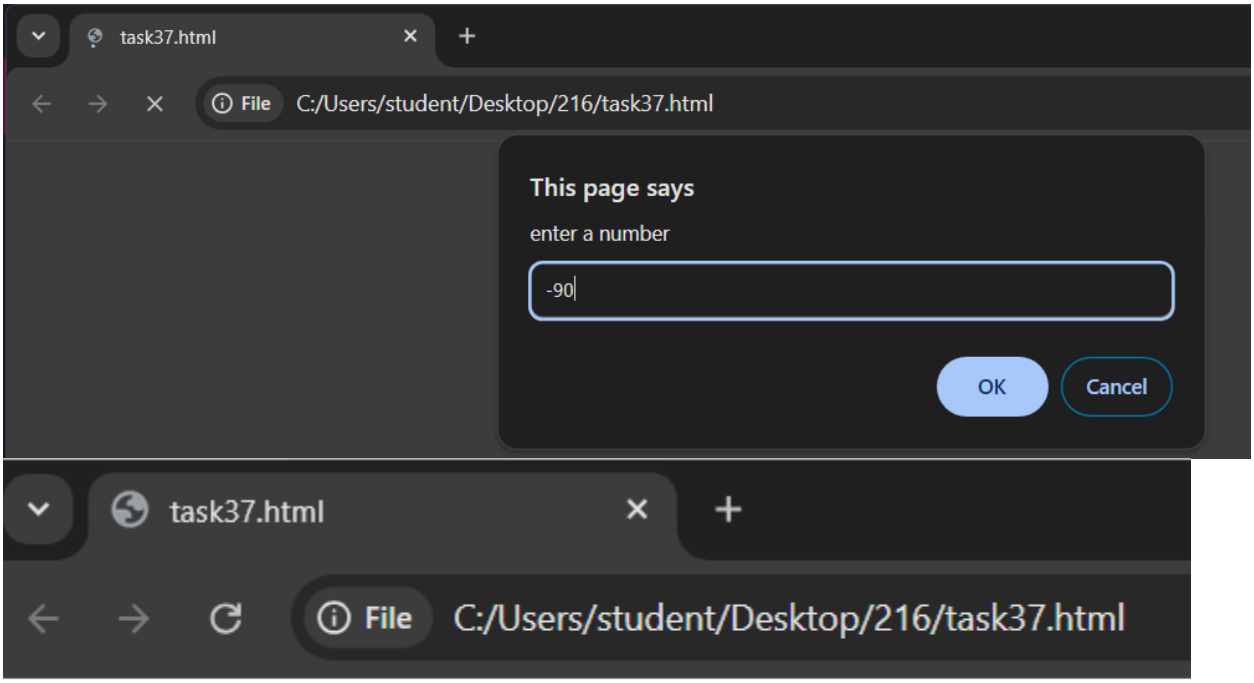




TASK 37:

```
<html>
   <body>
      <script>
         let a=prompt("enter a number");
         if(a==0)
      {
         document.write("it is zero");
      }
      if(a>0)
      {
         document.write("it is positive");
      }
      if(a<0)
      {
         document.write("it is negative");
      }
      </script>
   </body>
</html>
```

OUTPUT:

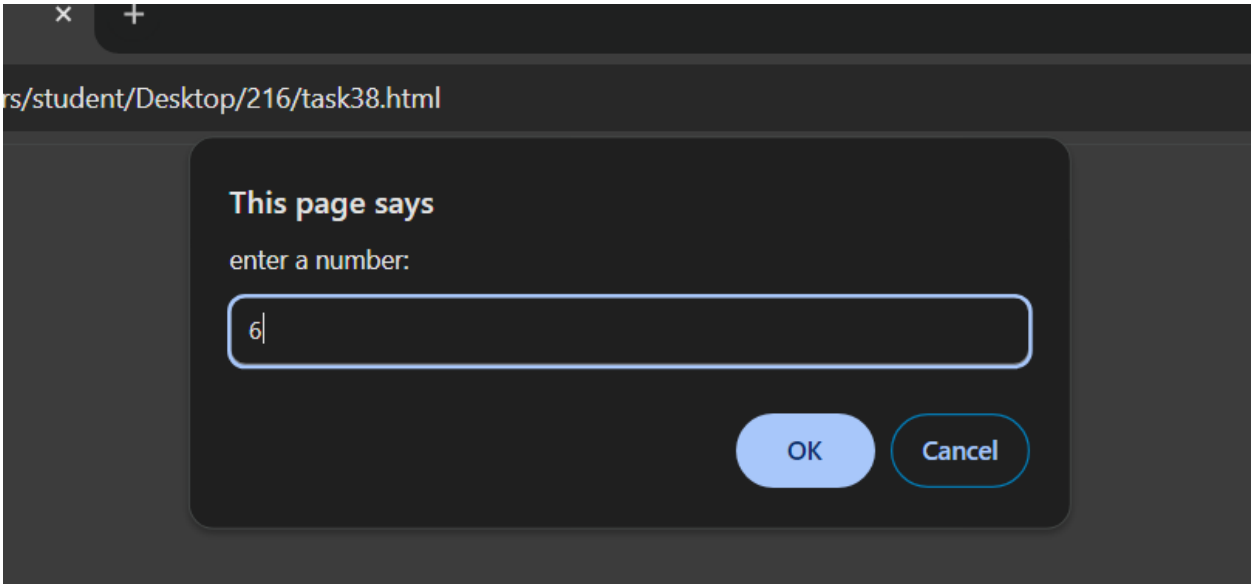


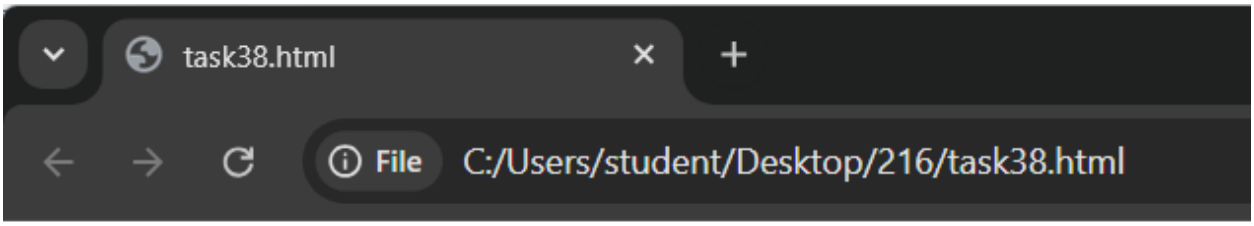
it is negative

TASK38:

```
<html>
   <body>
      <script>
         let a=prompt("enter a number:");
         let result=(a%2==0)?document.write("even"):document.write("odd");
      </script>
   </body>
</html>
```

OUTPUT:





even

TASK 39:

```
<html>
   <body>
      <script>
         let a=20;
         document.write(a?true:false);
      </script>
   </body>
</html>
```

OUTPUT:

TASK 40:

```
<html>
  <body>
    <script>
      let a=2;
      let b=3;
      let result=(a>b)?document.write("largest"):document.write("smallest");
    </script>
  </body>
</html>
```

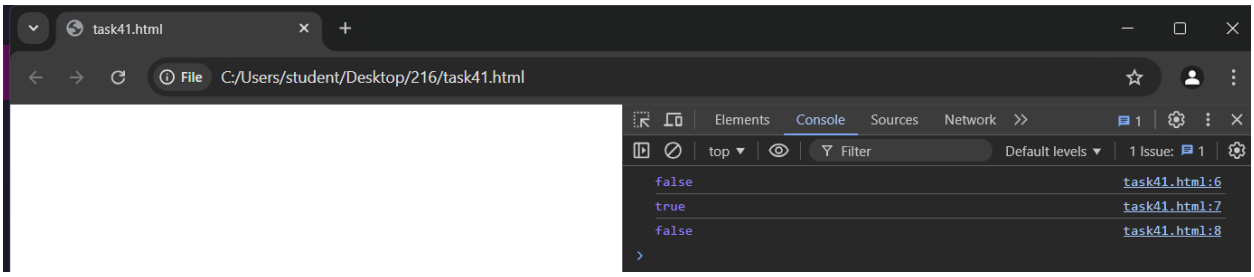
OUTPUT:

TASK 41:

```
<html>
  <body>
    <script>
      let a=20;
      let b=40;
      console.log((a>b)&&(a<b));
      console.log((a>b)||(a<b));
      console.log(!a);
```

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

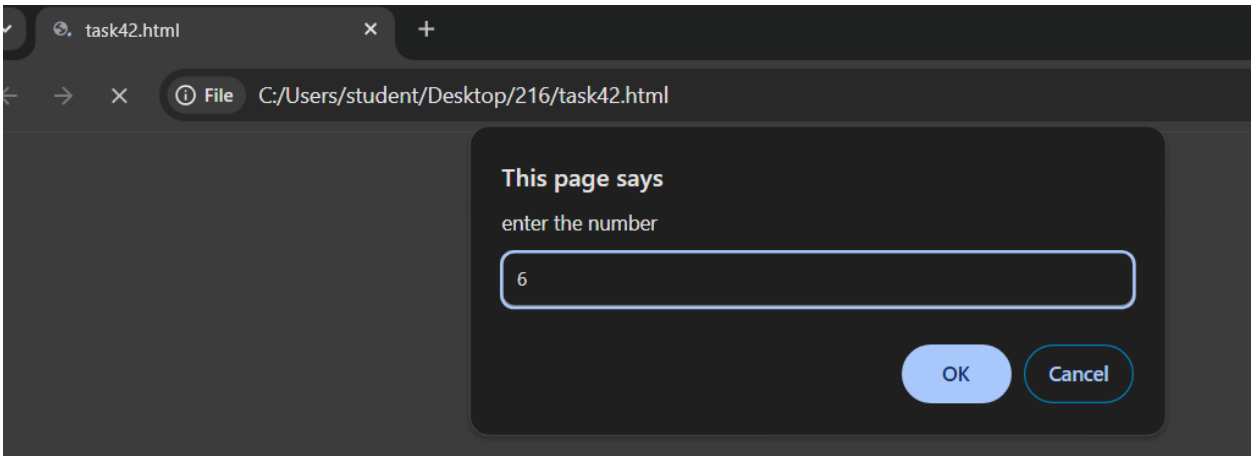
OUTPUT:



TASK 42:

```
<html>
  <body>
    <script>
      let a=prompt("enter the number");
      let b=(a>40 && a<60)?document.write("it is in range"):document.write("it is not in range");
    </script>
  </body>
</html>
```

OUTPUT:



it is not in range

TASK 43:

```
<html>
  <body>
    <script>
      let boolean=true;
      document.write(!boolean);
    </script>
  </body>
</html>
```

OUTPUT:

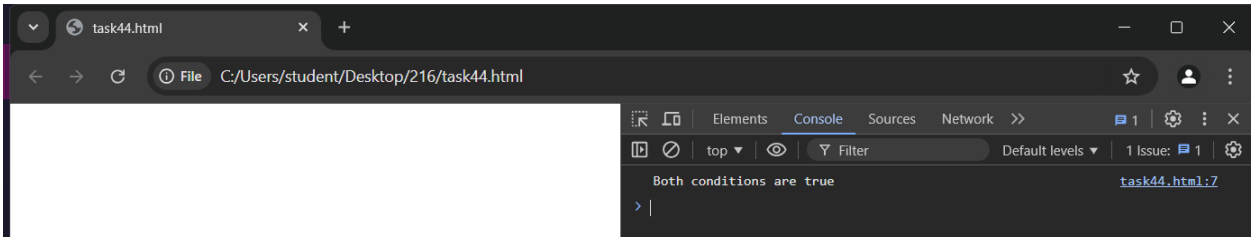
false

TASK 44:

```
<html>
  <body>
    <script>
      const a = 5;
const b = 10;
const result = (a > 0 && b < 20) && "Both conditions are true";
console.log(result);
    </script>
  </body>
```

</html>

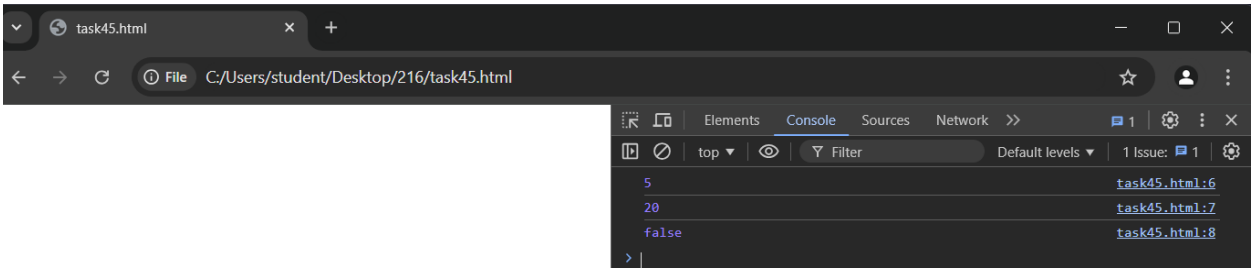
OUTPUT:



TASK 45:

```
<html>
  <body>
    <script>
      let a=5;
      let b=20;
      console.log(a||b);
      console.log(a&&b);
      console.log(!b);
    </script>
  </body>
</html>
```

OUTPUT:



TASK 46:

<html>

```
  <body>
    <script>
      function sum(a,b)
      {
        document.write(a+b);
      }
      sum(60,8);
    </script>
  </body>
</html>
```

OUTPUT:

TASK 47:

```
<html>
  <body>
    <script>
      function area(l,b)
      {
        document.write(l*b);
      }
      area(5,6);
    </script>
```

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

OUTPUT:

TASK 48:

```
<html>
  <body>
    <script>
      function call()
      {
        document.write("this is gayathiri");
      }
      call();
    </script>
  </body>
</html>
```

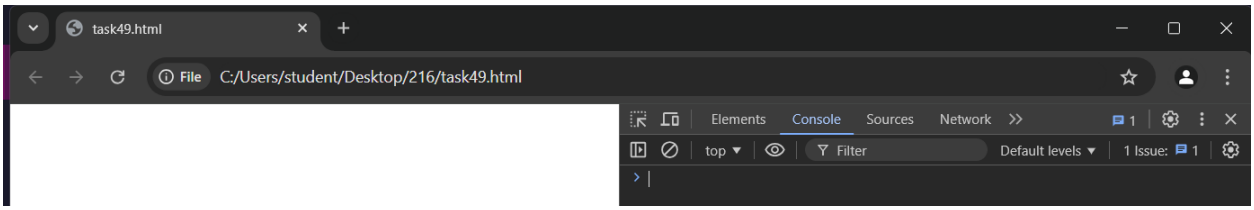
OUTPUT:

TASK 49:

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

```
        function call()
        {


        }
        call();


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

OUTPUT:

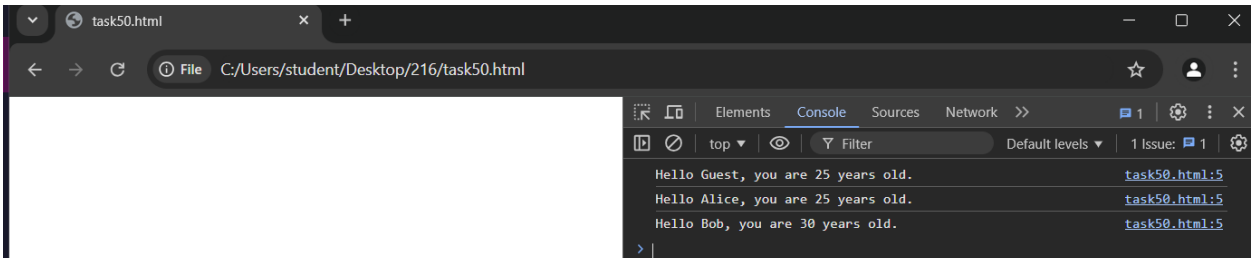


TASK 50:

```
<html>
  <body>
    <script>
   function greet(name = "Guest", age = 25) {
      console.log(`Hello ${name}, you are ${age} years old.`);
}
greet();
greet("Alice");
greet("Bob", 30);


    </script>
```

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

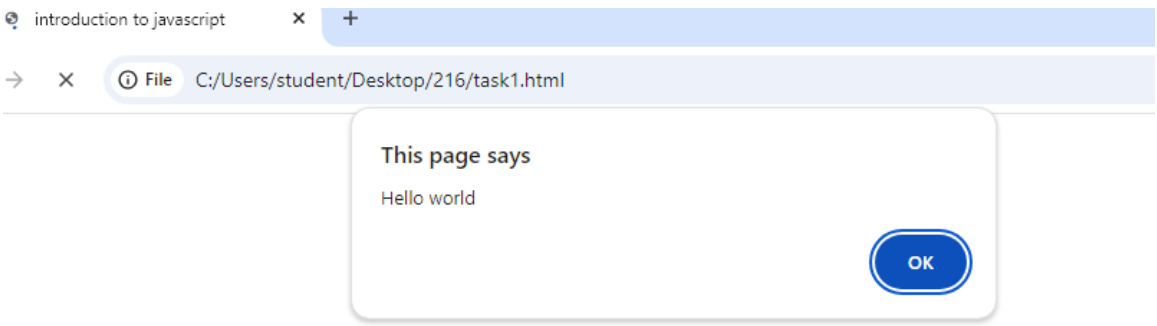
OUTPUT:



TASK 1:

```
<!DOCTYPE html>
<head>
  <title>introduction to javascript</title>
</head>
<body>
  <script>
    alert("Hello world");
  </script>
  </body>
  </html>
```

OUTPUT:

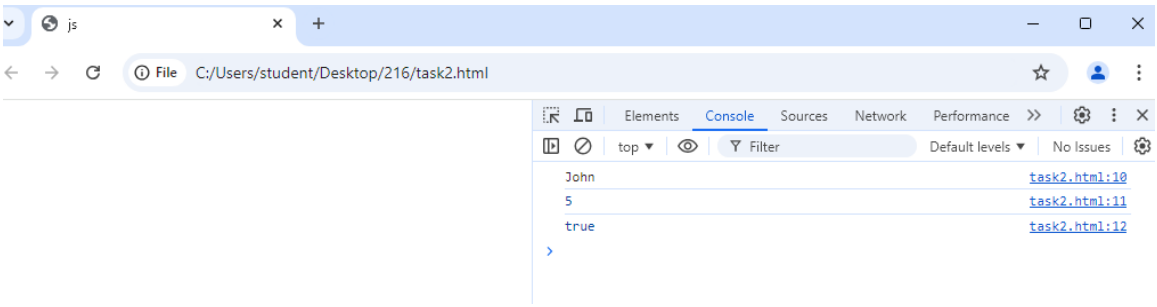


TASK 2:

```
<!DOCTYPE html>
<head>
  <title> js</title>
</head>
<body></body>
<script>
  var name="John";
```

```
    let num=5;
    let bool=true;
    console.log(name);
    console.log(num);
    console.log(bool);
</script>
</html>
```

OUTPUT:

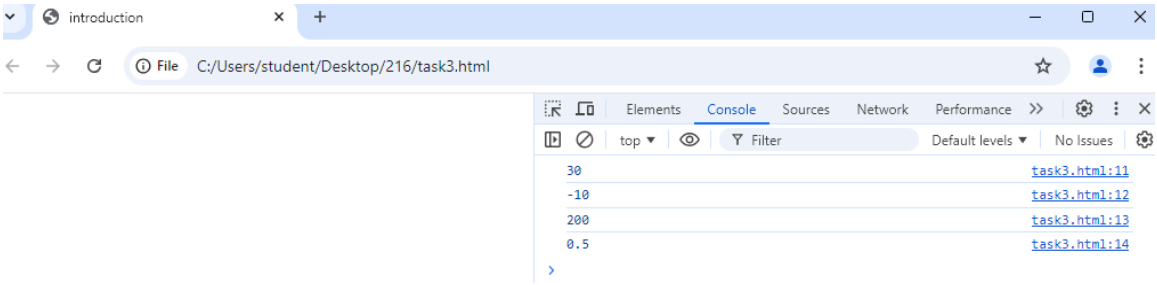


TASK 3:

```
<!DOCTYPE html>
<head>
    <title>
        introduction
    </title>
</head>
<body>
    <script>
        const a=10;
        const b=20;
        console.log(a+b);
        console.log(a-b);
        console.log(a*b);
```

```
    console.log(a/b);
  </script>
</body>
```

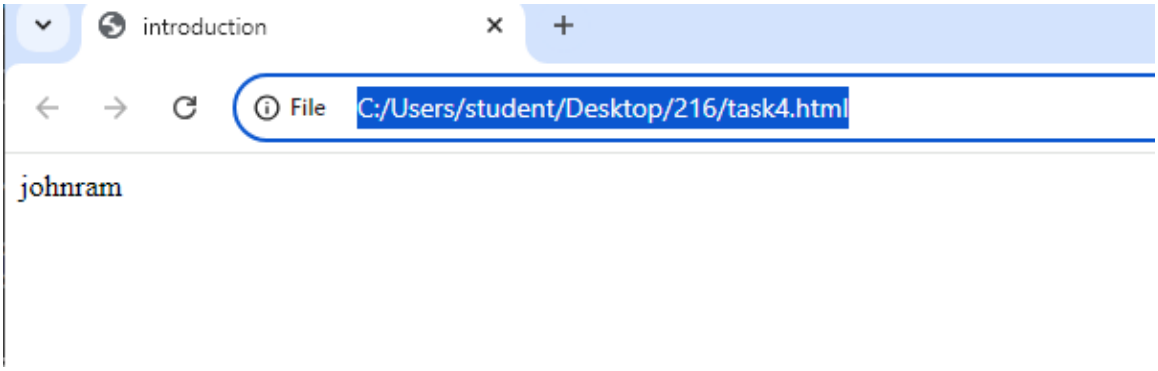
OUTPUT:



TASK 4:

```
<!DOCTYPE html>
<head>
  <title>introduction</title>
</head>
<body>
  <script>
    var name1="john";
    var name2="ram";
    document.write(name1+name2);
  </script>
</body>
</html>
```

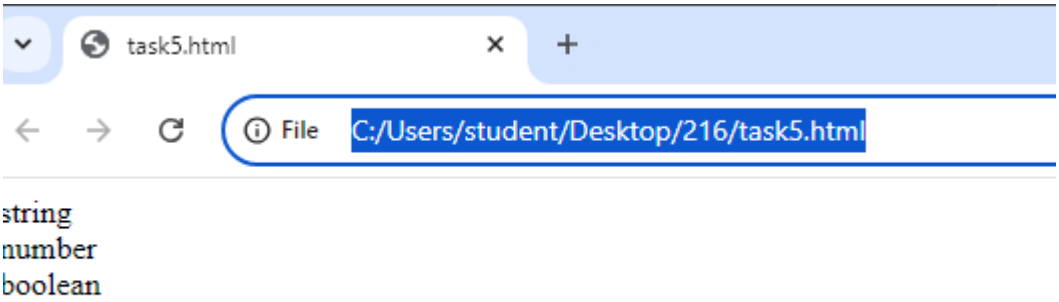
OUTPUT:



TASK 5:

```
<html>
  <body>
<script>
  var name="john";
  let n=3;
  let bool=false;
  document.write(typeof name+"<br>");
  document.write(typeof n+"<br>");
  document.write(typeof bool);
</script>
</body>
</html>
```

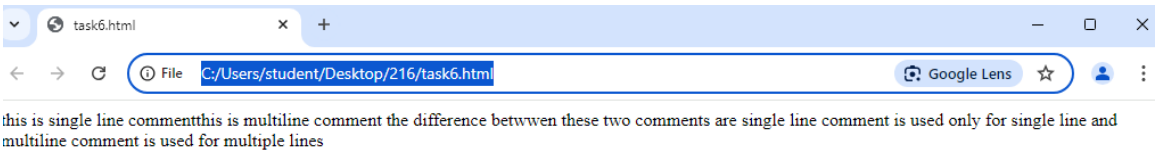
OUTPUT:



TASK 6:

```
<html>
  <body>
    <script>
      //single line comment
      document.write("this is single line comment");
      /*multi
      line
      comment*/
      document.write("this is multiline comment");
      document.write(" the difference betwwen these two comments are single line comment is used only for single line and multiline comment is used for multiple lines");
    </script>
  </body>
</html>
```

OUTPUT:

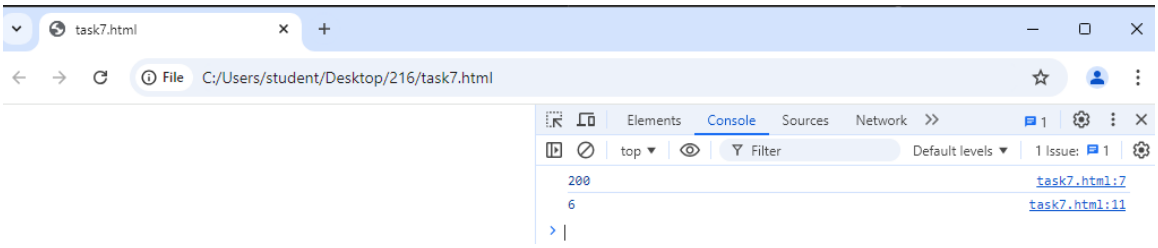


TASK 7:

```
<html>
  <body>
    <script>
      //semicolon separated
      let a=10;
      let b=20;
      console.log(a*b);
```

```
        //semicolon not separated
        let c =2
        let d=3
        console.log(c*d)
      </script>
  </body>
</html>
```

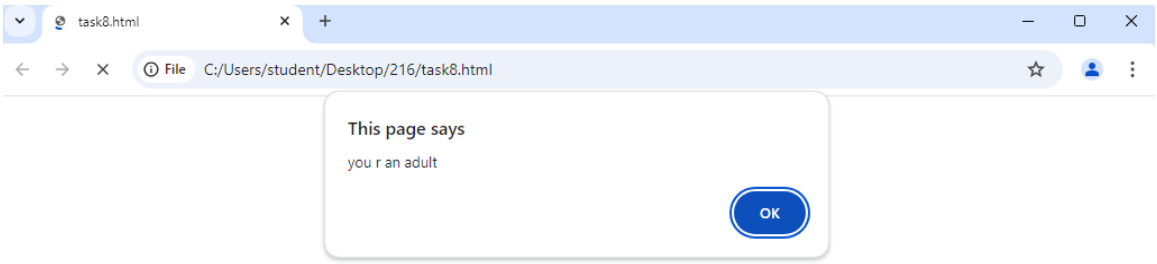
OUTPUT:



TASK 8:

```
<html>
  <body>
    <script>
      let age=prompt("enter your age:");
      if(age>10 && age<18)
        alert("you r child");
        if(age>18 &&age<25)
        alert("you r teenager");
          if(age>25)
          alert("you r an adult");

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

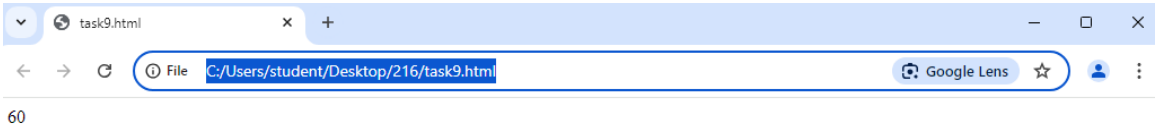
OUTPUT:



TASK 9:

```
<html>
  <body>
    <script>
      //multiple variables in single line
      let a,b,c;
      a=10;
      b=20;
      c=30;
      document.write(a+b+c);
    </script>
  </body>
</html>
```

OUTPUT:



TASK 10:

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

```
    <script>
        document.write("script tag at the top"+"<br>");
    </script>
  </head>
  <body>


  </body>
</html>
<html>
  <head>


  </head>
  <body>
    <script>
        document.write("script tag at the bottom");
    </script>
  </body>
</html>
```

OUTPUT