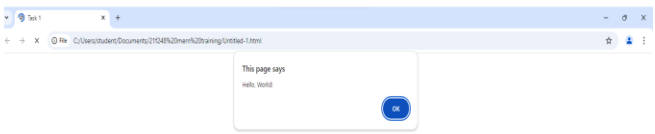
Task 1:

```
<html>
  <head>
    <title>Task 1</title>
  </head>
  <body>
    <script>
      alert("Hello, World!");
    </script>
  </body>
</html>
```

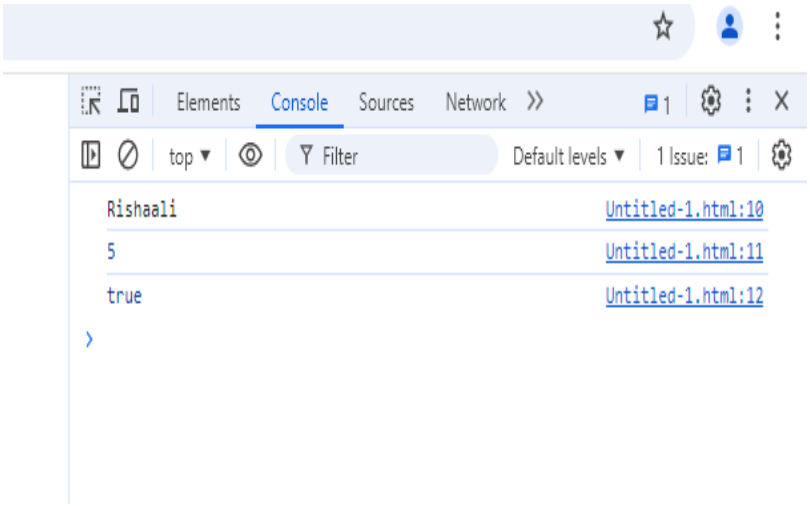
Output:



Task 2:

```
<html>
  <head>
    <title>Task 1</title>
  </head>
  <body>
    <script>
      var name = "Rishaali";
      var num = 5;
      var age = true;
      console.log(name);
      console.log(num);
      console.log(age);
    </script>
  </body>
</html>
```

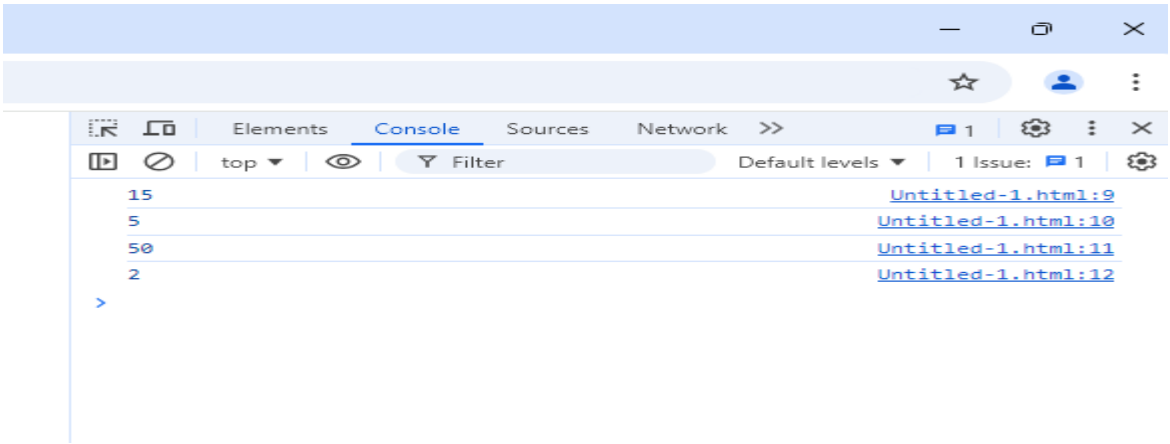
Output:



Task 3:

```
<html>
  <head>
    <title>Task 1</title>
  </head>
  <body>
    <script>
      var num1 = 10;
      var num2 = 5;
      console.log(num1 + num2);
      console.log(num1 - num2);
      console.log(num1 * num2);
      console.log(num1 / num2);
    </script>
  </body>
</html>
```

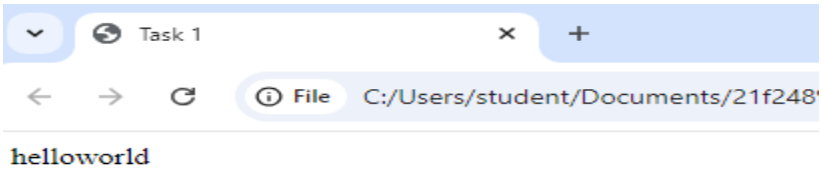
Output:



Task 4:

```
<html>
  <head>
    <title>Task 1</title>
  </head>
  <body>
    <script>
      var s1 = "hello";
      var s2 = "world";
      document.writeln(s1 + s2);
    </script>
  </body>
</html>
```

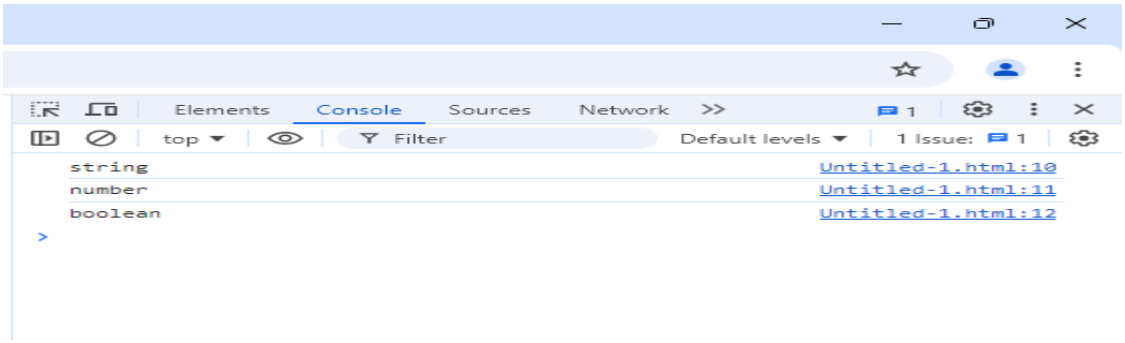
Output:



Task 5:

```
<html>
  <head>
    <title>Task 1</title>
  </head>
  <body>
    <script>
      var name = "Rishaali";
      var num = 5;
      var age = true;
      console.log(typeof name);
      console.log(typeof num);
      console.log(typeof age);
    </script>
  </body>
</html>
```

Output:


Elements
Console
Sources
Network
top
Filter
Default levels
1 Issue: 1
string
number
boolean
Untitled-1.html:10
Untitled-1.html:11
Untitled-1.html:12

Task 6:

```
<html>
  <head>
    <title>Task 1</title>
  </head>
  <body>
    <script>
      var name = "Rishaali";
      // this is single line comment
      /*
      var num = 5;
      var age = true;
      console.log(typeof num);
      console.log(typeof age);
      this is multi-line comments*/
      console.log(typeof name);
    </script>
  </body>
</html>
```

Single line comment:

// is used.

Comments can be given for a line.

Multi-line comment:

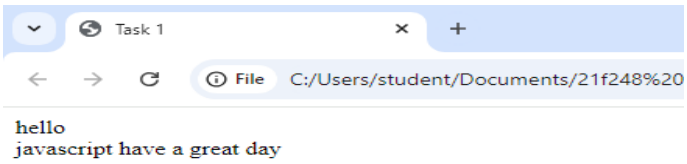
/**/ is used.

Comments can be given for many lines.

Task 7:

```
<html>
  <head>
    <title>Task 1</title>
  </head>
  <body>
    <script>
      document.writeln("hello" + "<br>");
      document.writeln("javascript");
      document.writeln("have a great");
      document.writeln("day");
    </script>
  </body>
</html>
```

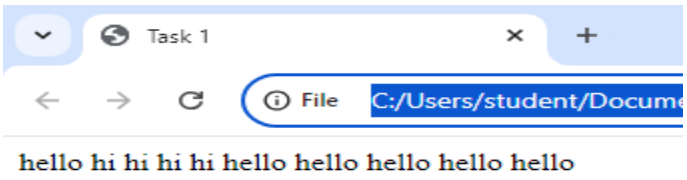
Output:



Task 8:

```
<html>
  <head>
    <title>Task 1</title>
  </head>
  <body>
    <script>
      var n = 10;
      while (n > 0) {
        n--;
        while (n > 5) {
          document.writeln("hi");
        }
      }
    </script>
  </body>
</html>
```

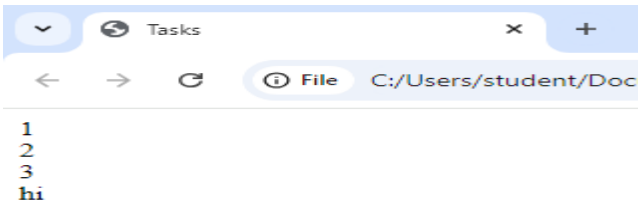
Output:



Task 9:

```
<html>
  <head>
    <title>Tasks</title>
  </head>
  <body>
    <script>
      var a = 1,
        b = 2,
        c = 3,
        d = "hi";
      document.writeln(a + "<br>" + b + "<br>" + c + "<br>" + d);
    </script>
  </body>
</html>
```

Output:

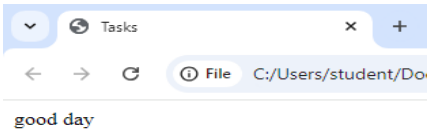


Task 10:

```
<html>
  <head>
    <title>Task 1</title>
  </head>

  <script>
    document.write("good day");
  </script>
  <body></body>
</html>
<html>
  <head>
    <title>Task 1</title>
  </head>
  <body>
    <script>
      document.write("good day");
    </script>
  </body>
</html>
```

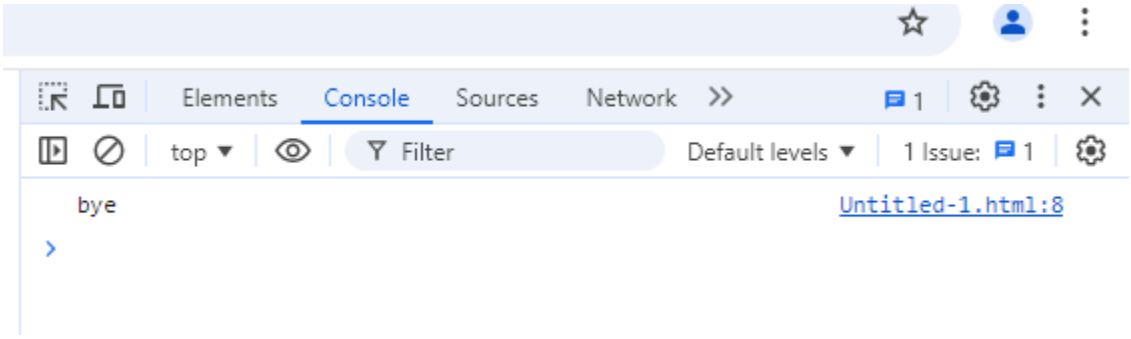
Output:



Task 11:

```
<html>
  <head>
    <title>Tasks</title>
  </head>
  <body>
    <script>
      num = "bye";
      console.log(num);
    </script>
  </body>
</html>
```

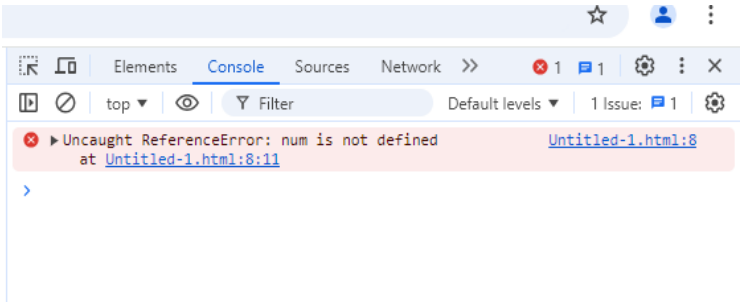
Output:



Task 12:

```
<html>
  <head>
    <title>Tasks</title>
  </head>
  <body>
    <script>
        'use strict';
      num = "bye";
      console.log(num);
    </script>
  </body>
</html>
```

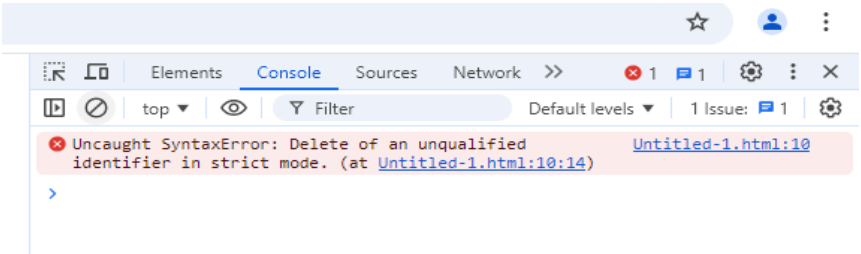
Output:



Task 13:

```
<html>
  <head>
    <title>Tasks</title>
  </head>
  <body>
    <script>
      "use strict";
      num = "bye";
      console.log(num);
      delete num;
      function x(p1, p2) {}
      delete x;
    </script>
  </body>
</html>
```

Output:

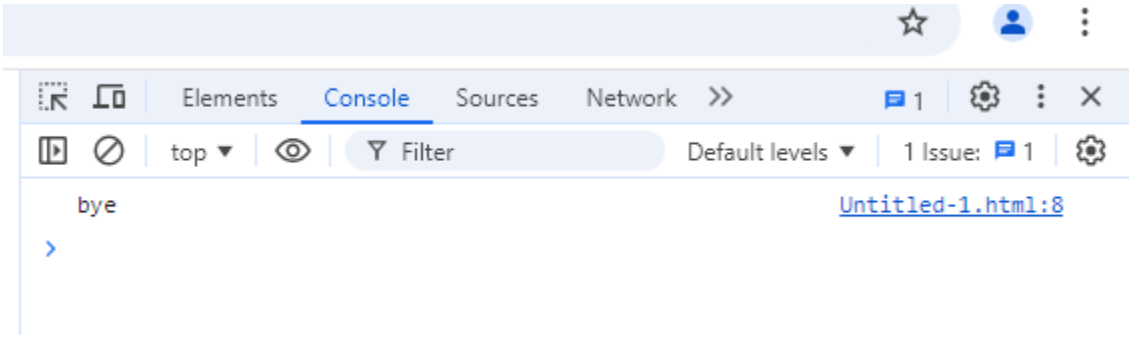


Task 14:

```
<html>
  <head>
    <title>Tasks</title>
  </head>
  <body>
    <script>
      num = "bye";
      console.log(num);
    </script>
  </body>
```

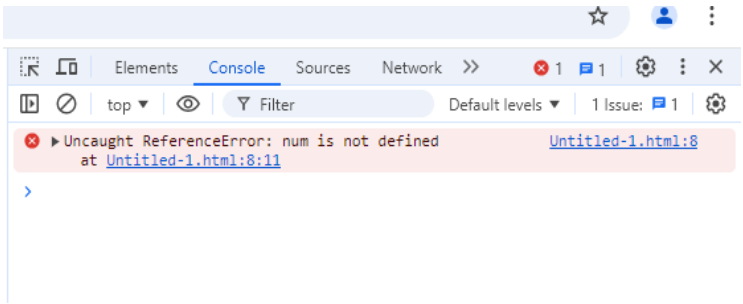
```
</html>
```

Output:




```
<html>
  <head>
    <title>Tasks</title>
  </head>
  <body>
    <script>
        'use strict';
      num = "bye";
      console.log(num);
    </script>
  </body>
</html>
```

Output:

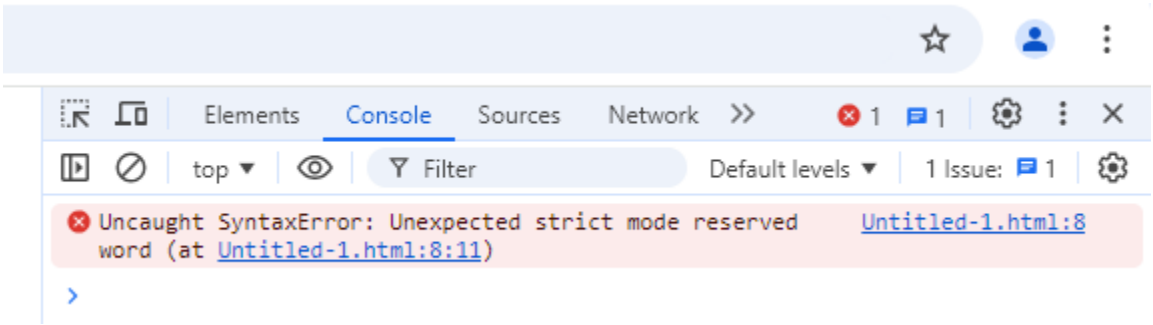


Task 15:

```
<html>
  <head>
    <title>Tasks</title>
  </head>
  <body>
```

```
    <script>
      "use strict";
      var let = 11;
      console.log(let);
    </script>
  </body>
</html>
```

Output:



Task 16:

```
<html>
  <head>
    <title>Tasks</title>
  </head>
  <body>
    <script>
   var a =1;
   let b= 3;
   const PI = 3.14;
    </script>
  </body>
</html>
```

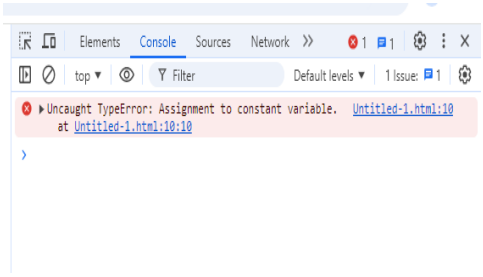
We use let when we know that the value of the variable may change over time. For example, when we are working with a variable inside a loop, or when we want to update the value of a variable based on user input. On the other hand, we use const when we want to create a variable that should not be reassigned.

Task 17:

```
<html>
  <head>
    <title>Tasks</title>
  </head>
  <body>
    <script>
      var a = 1;
      let b = 3;
      const PI = 3.14;
      PI = 4.3;
      console.log(PI);
```

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

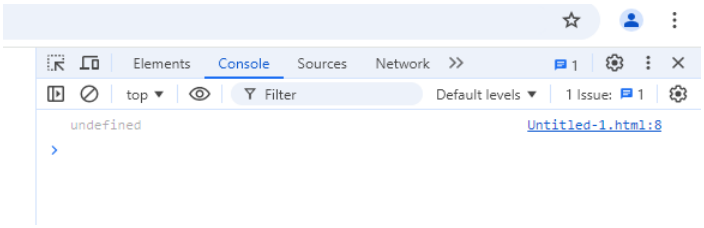
Output:



Task 18:

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

Output:

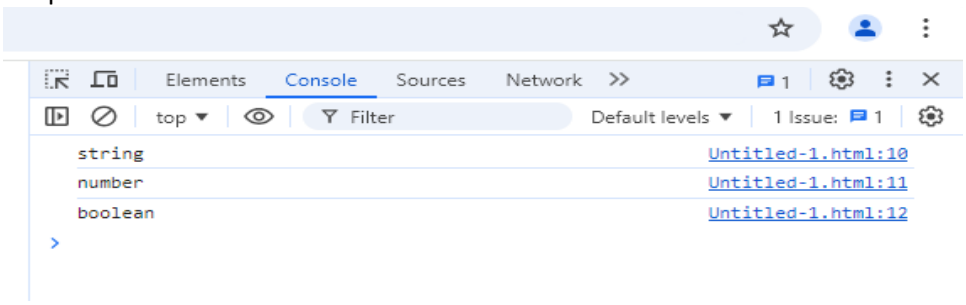


Task 19:

```
<html>
<head>
<title>Tasks</title>
</head>
<body>
<script>
var name = "Rishaali";
var num = 5;
var age = true;
console.log(typeof name);
console.log(typeof num);
console.log(typeof age);
```

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

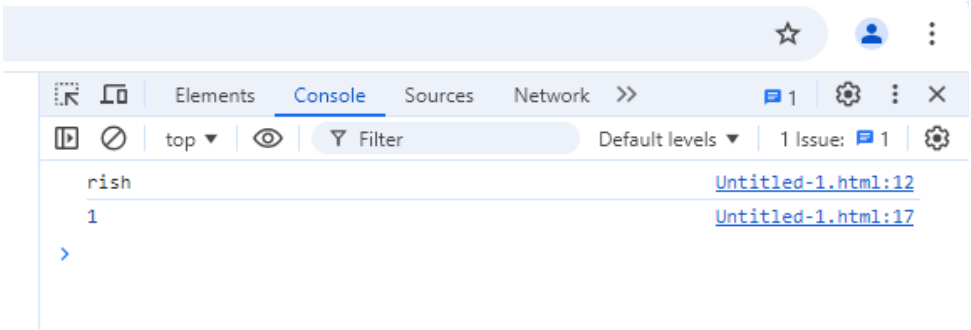
Output:



Task 20:

```
<html>
  <head>
    <title>Tasks</title>
  </head>
  <body>
    <script>
      const person = {
        name: "rish",
        age: 19,
      };
      const { name: fullname } = person;
      console.log(fullname);
      let obj ={
        a:1
      };
      let{a:a1}=obj;
      console.log(a1);
    </script>
  </body>
</html>
```

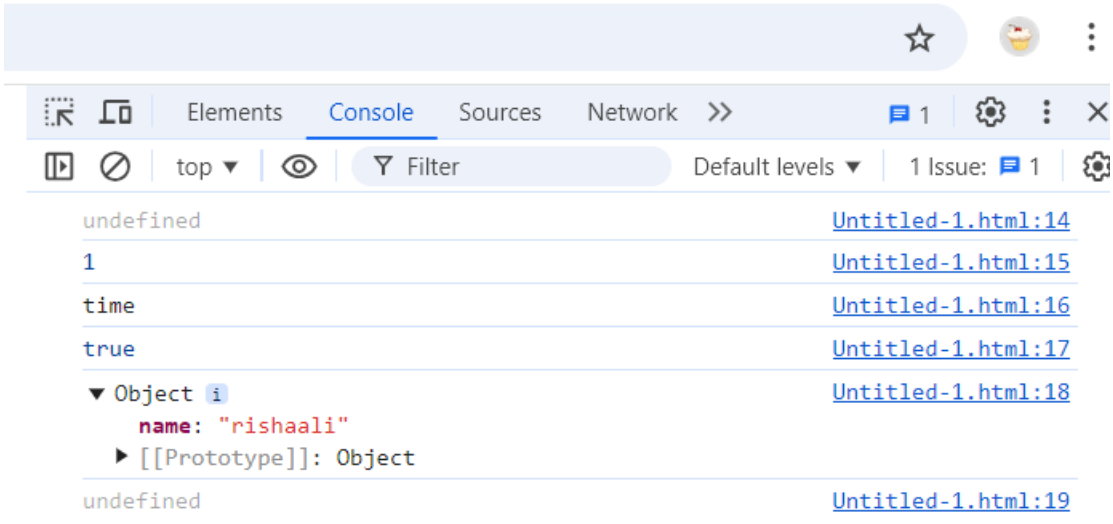
Output:



Task 21:

```
<html>
    <head>
        <title>tasks</title>
    </head>
    <body>
        <script>
            var a;
            var b=1;
            var c="time";
            var d=true;
            var obj={
                name:"rishaali"
            };
            console.log(a);
            console.log(b);
            console.log(c);
            console.log(d);
            console.log(obj);
            console.log(e);
            var e=null;
            </script>
            </body>
            </html>
```

Output:

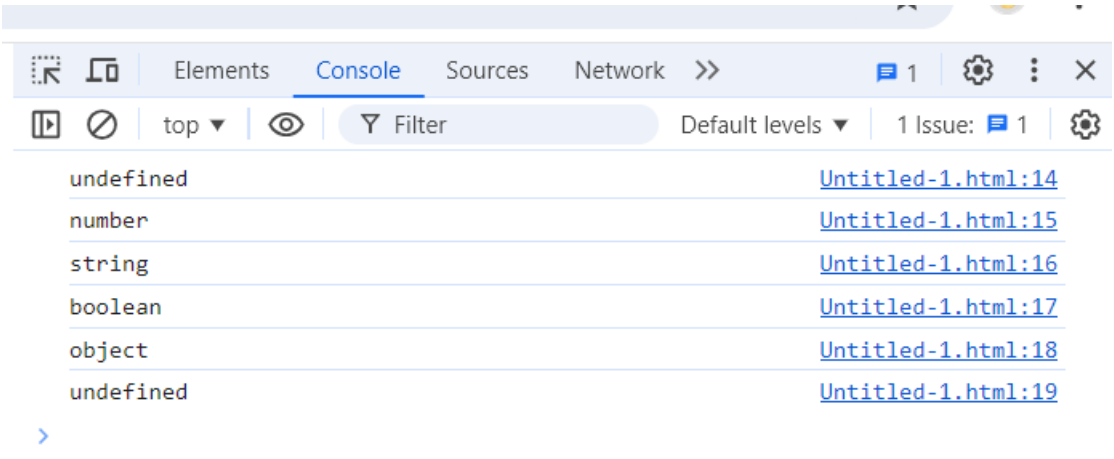


Task 22:

```
<html>
    <head>
        <title>tasks</title>
    </head>
    <body>
```

```
        <script>
            var a;
            var b=1;
            var c="time";
            var d=true;
            var obj={
                name:"rishaali"
            };
            console.log( typeof a);
            console.log(typeof b);
            console.log(typeof c);
            console.log(typeof d);
            console.log(typeof obj);
            console.log(typeof e);
            var e=null;
            </script>
            </body>
            </html>
```

Output:

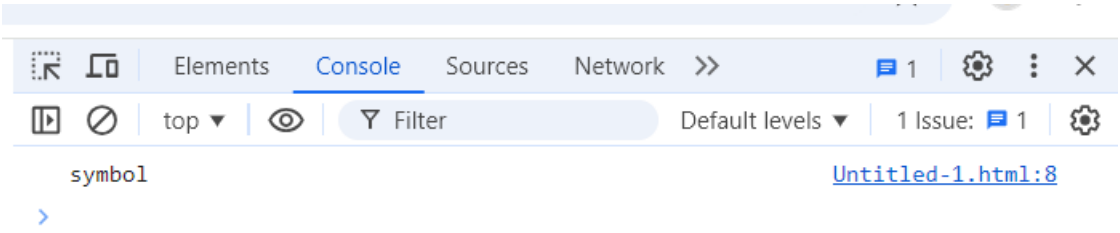


Task 23:

```
<html>
    <head>
        <title>tasks</title>
    </head>
    <body>
        <script>
            let a= Symbol("fine");
            console.log( typeof a);

            var e=null;
            </script>
            </body>
            </html>
```

Output:

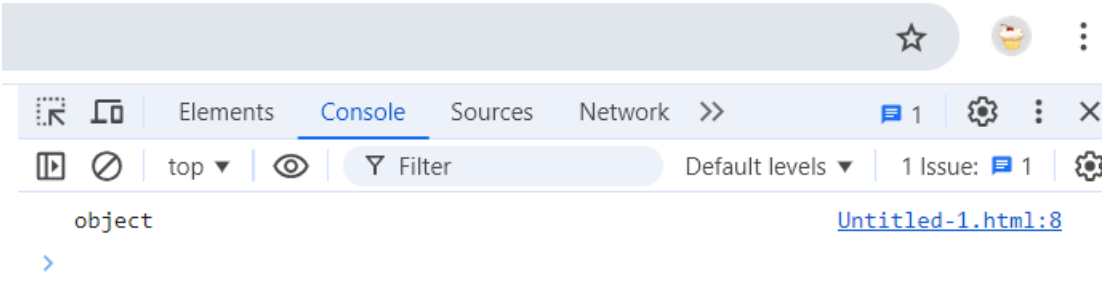


Task 24:

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

            var e=null;
            </script>
            </body>
            </html>
```

Output:

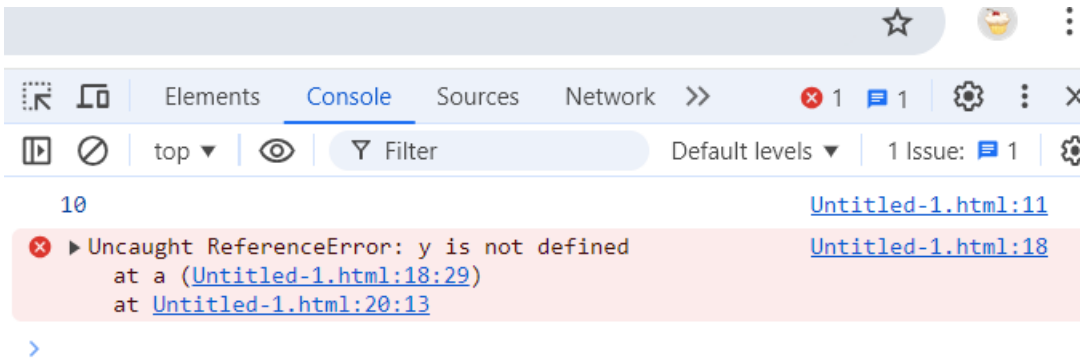


Task 25:

```
<html>
    <head>
        <title>tasks</title>
    </head>
    <body>
        <script>
```

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

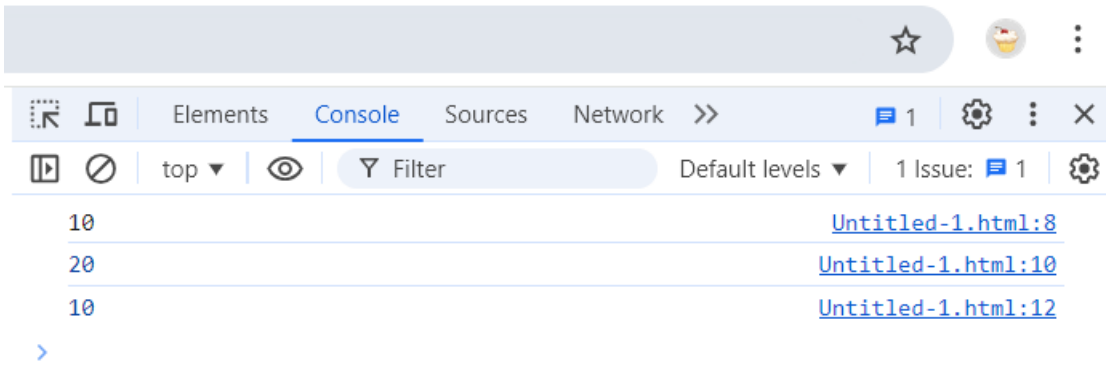
Output:



Task 26:

```
<html>
    <head>
        <title>tasks</title>
    </head>
    <body>
        <script>
           var s="10";
           console.log(s);
           var num= s*2;
           console.log(num);
           var res=parseInt(s,10);
           console.log(res);
            </script>
            </body>
            </html>
```

Output:



Task 27:

```
<html>
    <head>
        <title>tasks</title>
    </head>
    <body>
        <script>
           var s="10";
           console.log(s);
           var res=Boolean(s,10);
           console.log(res);
           var b=true;
           console.log(b);
           var r=b.toString();
           console.log(r);
           console.log(typeof r);
            </script>
            </body>
            </html>
```

Output:

Task 28:

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

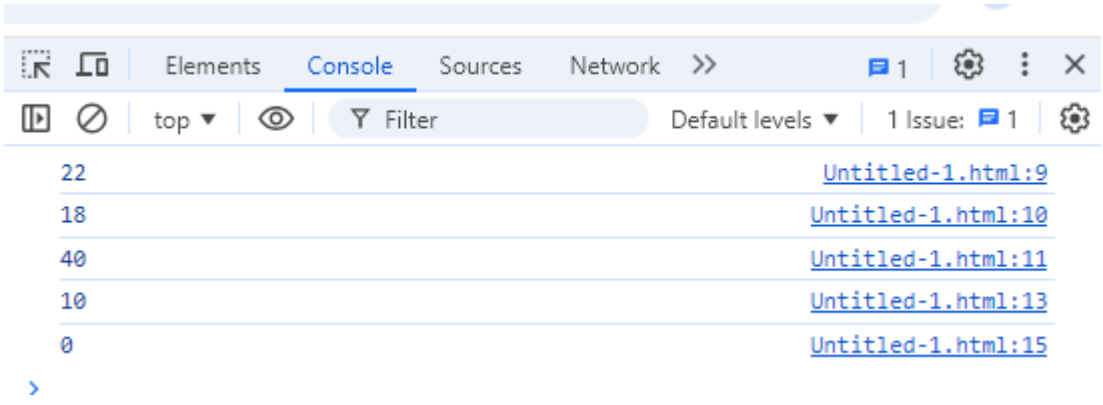
```
        <title>tasks</title>
    </head>
    <body>
        <script>
           var a=20;
             var b=2;
             console.log(a+b);
              console.log(a-b);
             console.log(a*b);

            console.log(a/b);

           console.log(a%b);

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

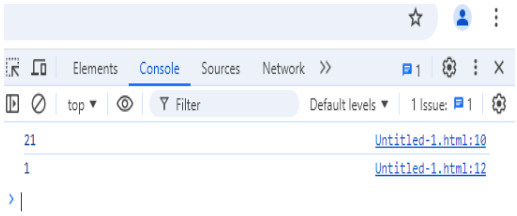
Output:



Task 29:

```
<html>
    <head>
        <title>tasks</title>
    </head>
    <body>
        <script>
           var a=20;
             var b=2;
             a++;
             console.log(a);
               b--;
              console.log(b);
            </script>
            </body>
            </html>
```

Output:

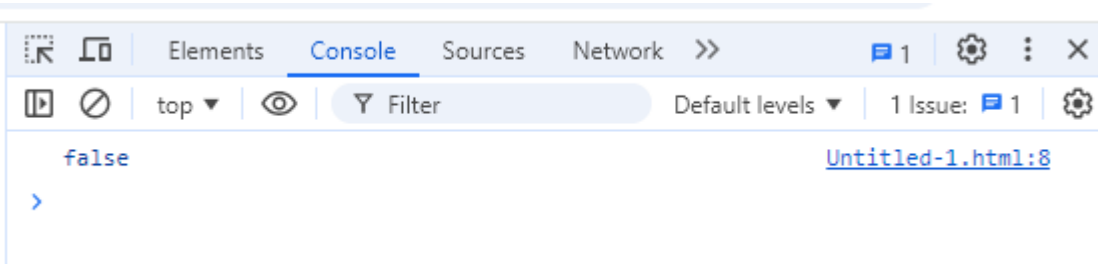


Task 30:

```
<html>
    <head>
        <title>tasks</title>
    </head>
    <body>
        <script>
          let res= (10+(10+2*2) > 40)|| !true;
             console.log(res);


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

Output:

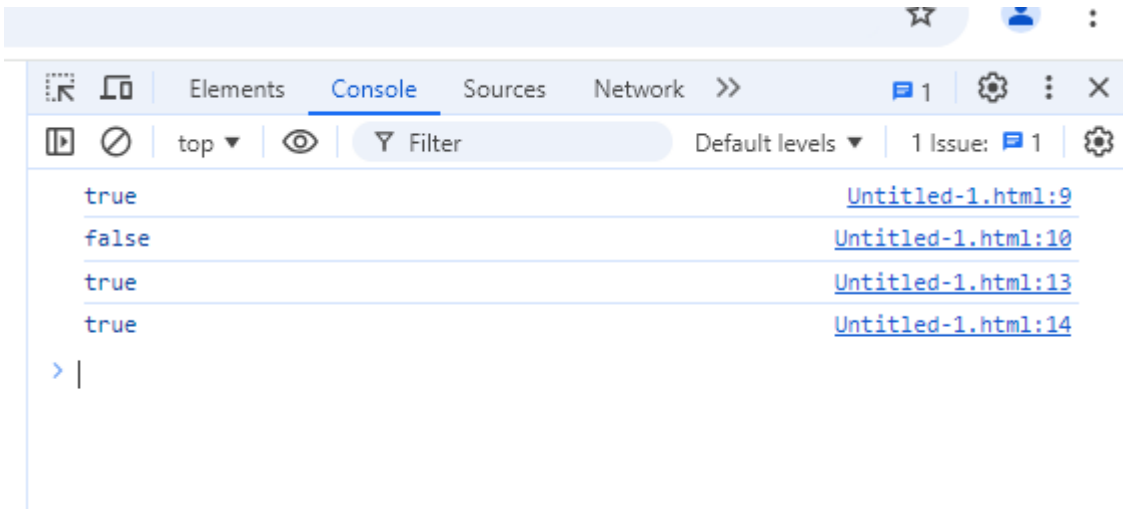


Task 31:

```
<html>
    <head>
        <title>tasks</title>
    </head>
    <body>
        <script>
        let a=11;
        let b=3;
        console.log(a>b);
        console.log(a<b);
        a=10;
        b=10;
        console.log(a>=b);
```

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

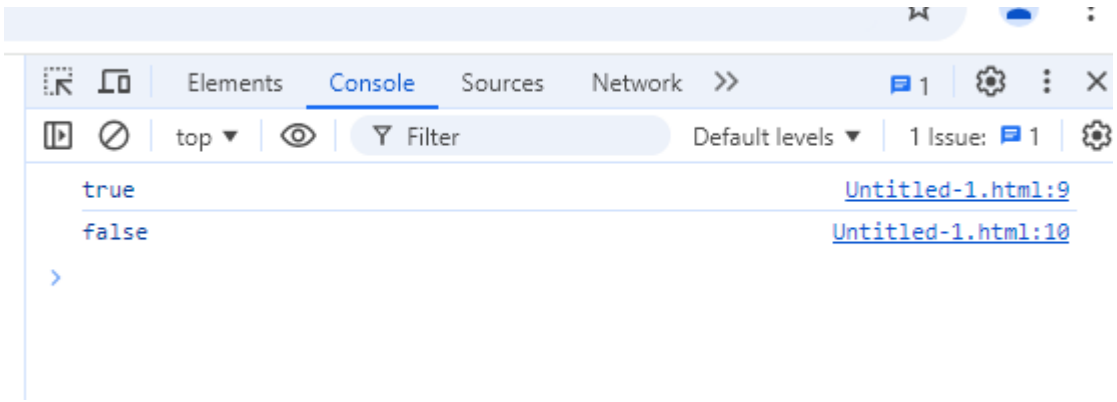
Output:



Task32:

```
<html>
    <head>
        <title>tasks</title>
    </head>
    <body>
        <script>
        let a=11;
        let b="11";
        console.log(a==b);
        console.log(a===b);
            </script>
            </body>
            </html>
```

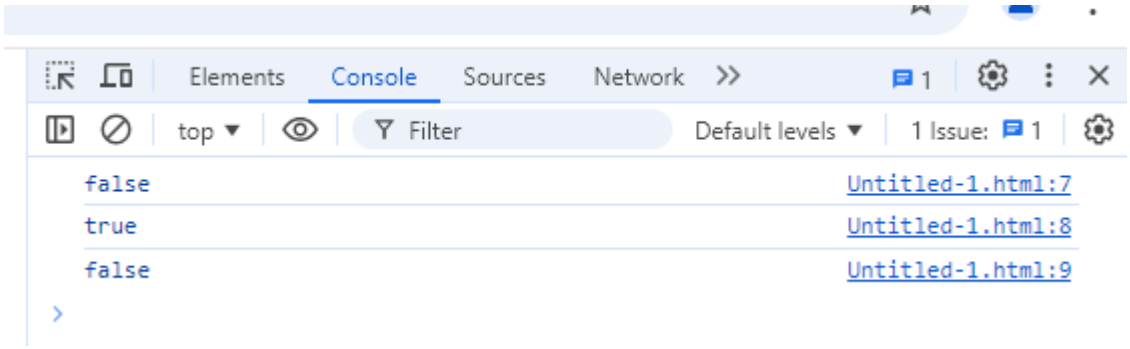
Output:



Task 33:

```
<html>
    <head>
        <title>tasks</title>
    </head>
    <body>
        <script>
        console.log("apple">"ball");
        console.log("app"=="app");
        console.log("app"=="App");
            </script>
            </body>
            </html>
```

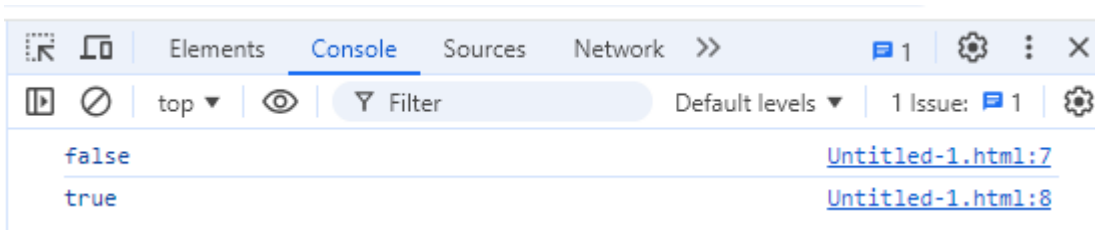
Output:



Task 34:

```
<html>
    <head>
        <title>tasks</title>
    </head>
    <body>
        <script>
        console.log("10"!=10);
        console.log("10"!==10);
            </script>
            </body>
            </html>
```

Output:

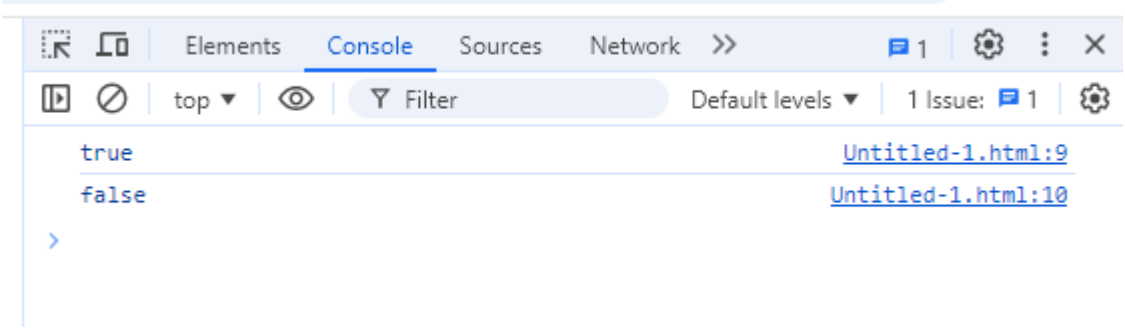


Task35:

```
<html>
```

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

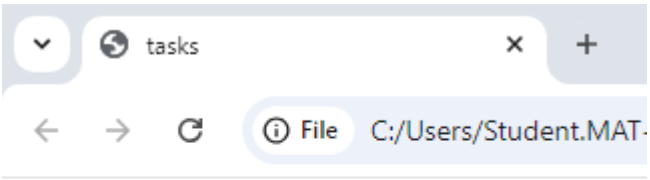
Output:



Task 36:

```
<html>
    <head>
        <title>tasks</title>
    </head>
    <body>
        <script>
          let a=6;
          if(a%2==0){
            document.writeln("even");
          }
          else
          document.writeln("odd");
            </script>
            </body>
            </html>
```

Output:

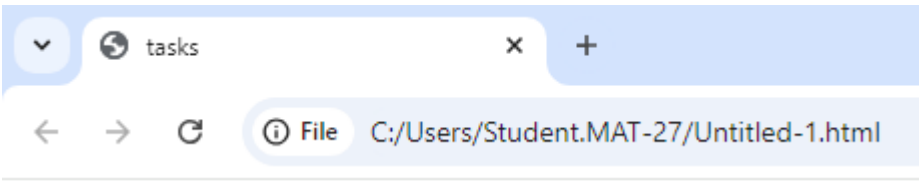


even

Task 37:

```
<html>
    <head>
        <title>tasks</title>
    </head>
    <body>
        <script>
          let a=6;
          if(a<0){
            document.writeln("negative");
          }
          else if(a>0){
          document.writeln("positive");}
          else
          document.writeln("zero");
            </script>
            </body>
            </html>
```

Output:



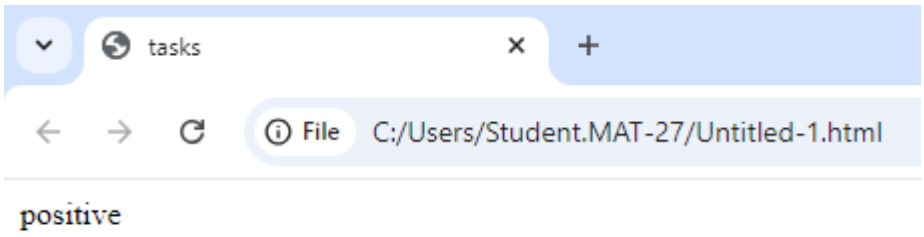
positive

Task 38:

```
<html>
    <head>
        <title>tasks</title>
    </head>
    <body>
        <script>
          let a=0;
```

```
        let
res=(a<0)?document.writeln("negative"):(a>0)?document.writeln("positive"):docu
ment.write("zero");
            </script>
            </body>
            </html>
```

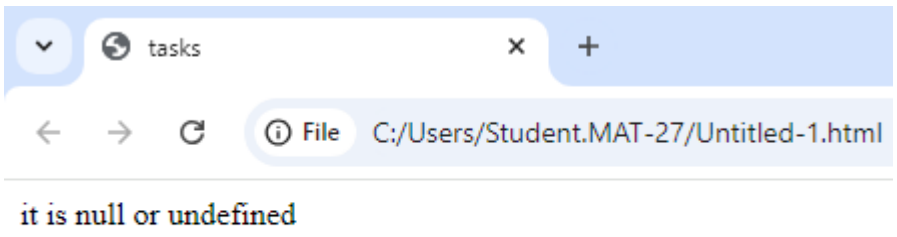
Output:



Task 39:

```
<html>
    <head>
        <title>tasks</title>
    </head>
    <body>
        <script>
         var a;
         var res=a!=null?"valid":"it is null or undefined";
         document.writeln(res);
            </script>
            </body>
            </html>
```

Output:

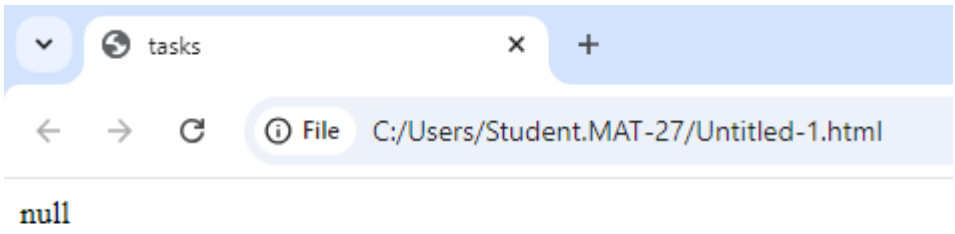


Task 40:

```
<html>
    <head>
        <title>tasks</title>
```

```
    </head>
    <body>
        <script>
         var a;
         var res= a==0?a=10:a =null;
         document.writeln(a);
            </script>
            </body>
            </html>
```

Output:

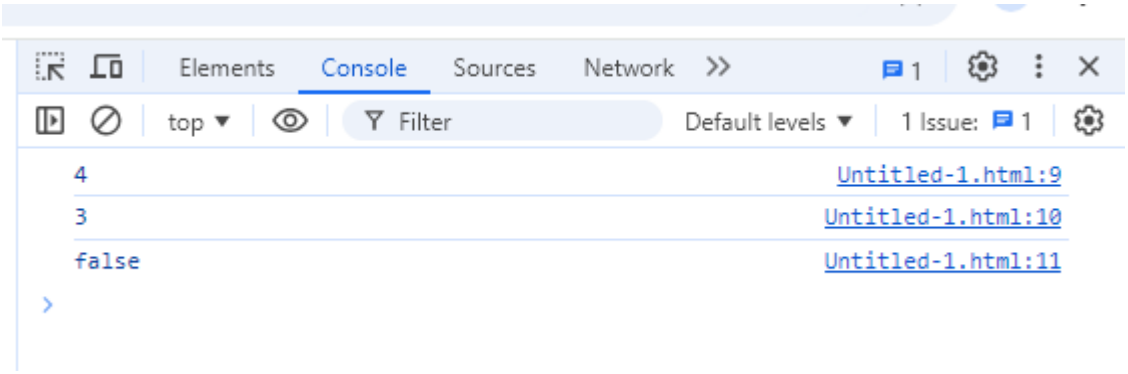


Task 41:

```
<html>
    <head>
        <title>tasks</title>
    </head>
    <body>
        <script>
         var a=3;
         var b=4;
         console.log(a && b);
         console.log(a || b);
         console.log(!(a && b));

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

Output:

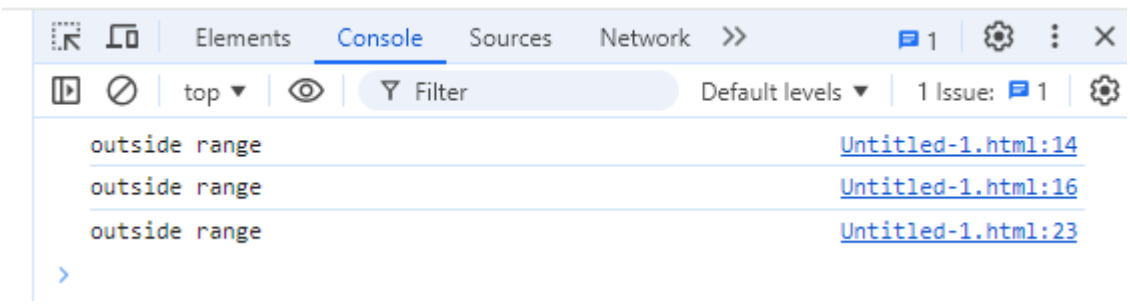


Task 42:

```
<html>
    <head>
        <title>tasks</title>
    </head>
    <body>
        <script>
         var a=3;
         var b=4;
         var c=5;
         if(a>b && a<c){
         console.log("within range");
         }
         else
         console.log("outside range");
        if(a>b || a<c){
         console.log("outside range");}
         else
         console.log("inside range");
        if(a>=b && a<=c){
            console.log("strictly within range");
        }
        else
        console.log("outside range");

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

Output:

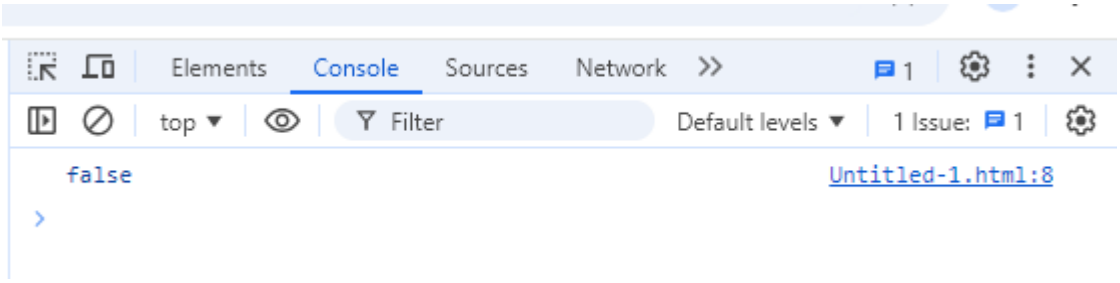


Task 43:

```
<html>
    <head>
        <title>tasks</title>
    </head>
    <body>
        <script>
         var a=true;
        console.log(!a);

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

Output:

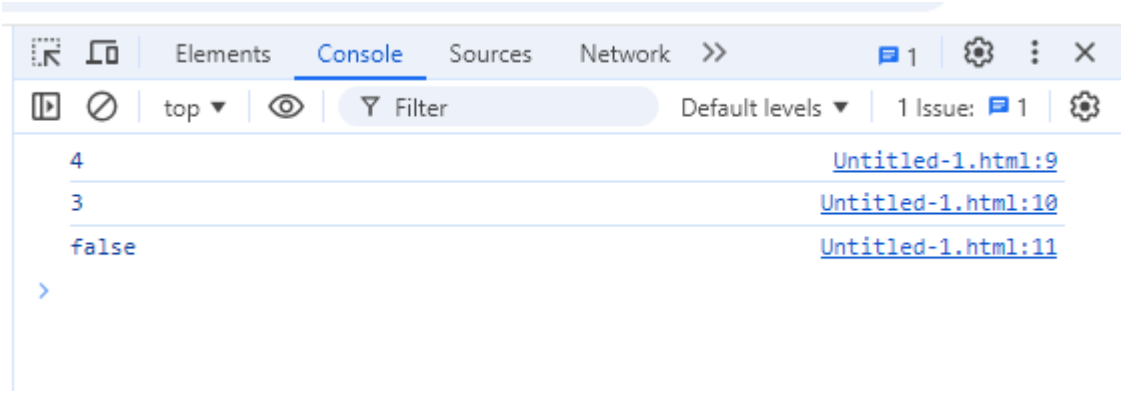


Task 44:

```
<html>
    <head>
        <title>tasks</title>
    </head>
    <body>
        <script>
         var a=3;
         var b=4;
         console.log(a && b);
         console.log(a || b);
         console.log(!(a && b));

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

Output:

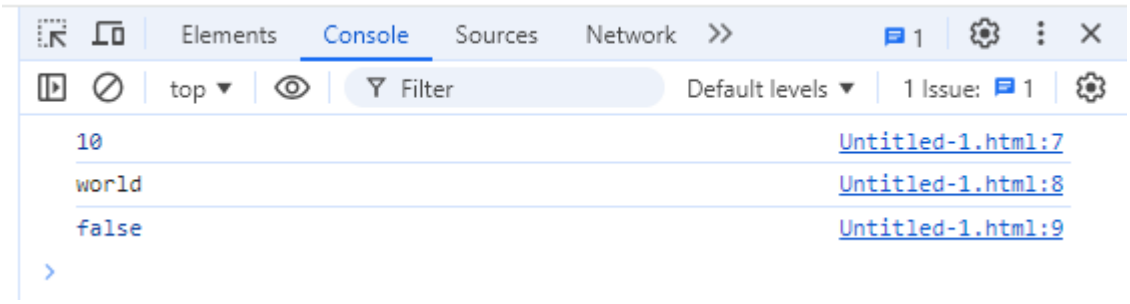


Task 45:

```
<html>
    <head>
        <title>tasks</title>
    </head>
    <body>
        <script>
         console.log("hello" && 10);
         console.log("world" || "day");
         console.log(!3);

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

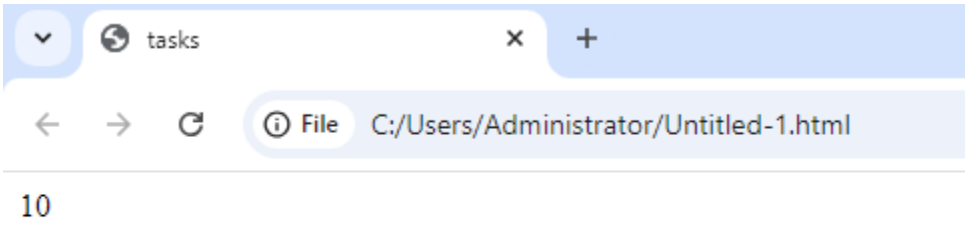
Output:



task 46:

```
<html>
<head>
    <title>tasks</title>
</head>
<body>
    <script>
     function sum(a,b){
            return a+b;
        }
        let res=sum(5,5);
        document.writeln(res);
    </script>
</body>
</html>
```

output:

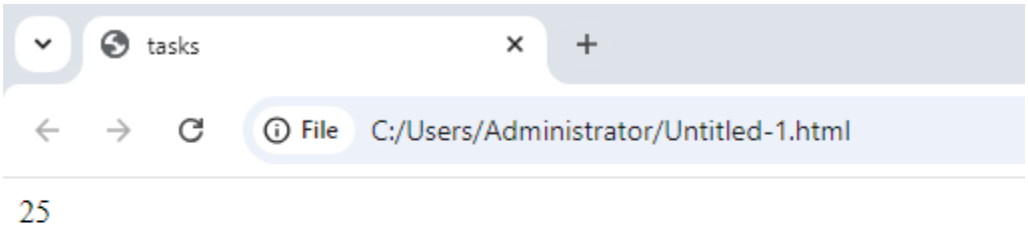


task 47:

```
<html>
<head>
    <title>tasks</title>
```

```
</head>
<body>
    <script>
      function area(l,b){
            return l*b;
        }
        let res=area(5,5);
        document.writeln(res);
    </script>
</body>
</html>
```

output:

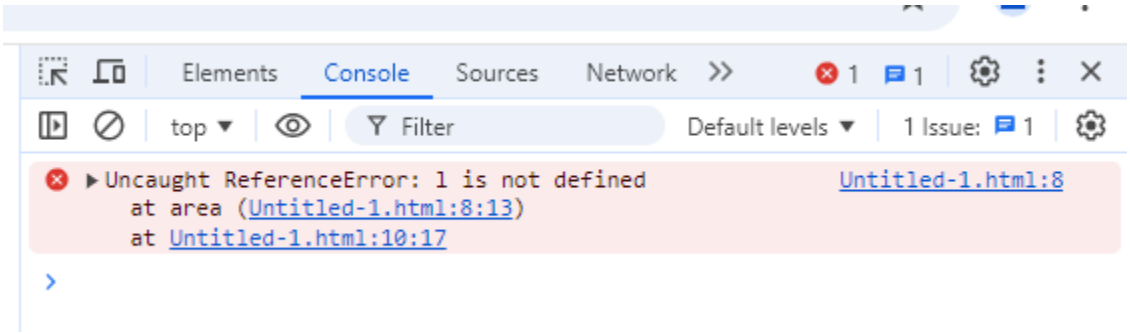


task 48:

```
<html>
<head>
    <title>tasks</title>
</head>
<body>
    <script>
      function area(){
```

```
            return l*b;
        }
        let res=area(5,5);
        document.writeln(res);
    </script>
</body>
</html>
```

output:

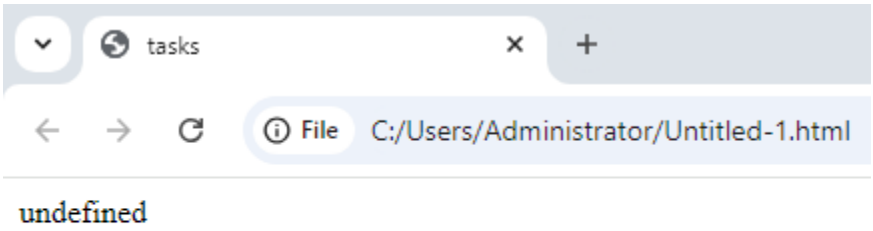


task 49:

```
<html>
<head>
    <title>tasks</title>
</head>
<body>
    <script>
      function area(l,b){
            return;
        }
        let res=area(5,5);
        document.writeln(res);
    </script>
```

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

output:

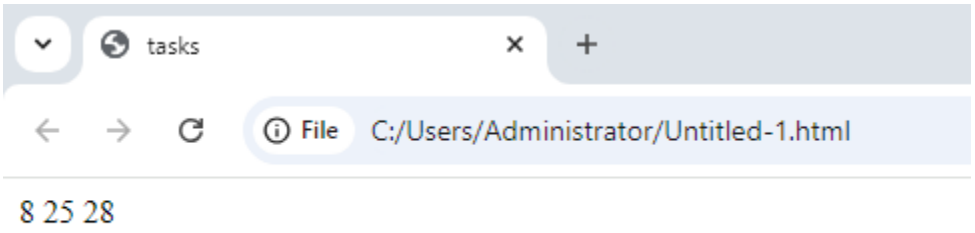


task 50:

```
<html>
<head>
    <title>tasks</title>
</head>
<body>
    <script>
      function area(l=2,b=4){
            return l*b;
        }
        let ans1 = area();
        document.writeln(ans1);
        let res=area(5,5);
        document.writeln(res);
        let ans = area(7);
        document.writeln(ans);
    </script>
</body>
```

</html>

output:

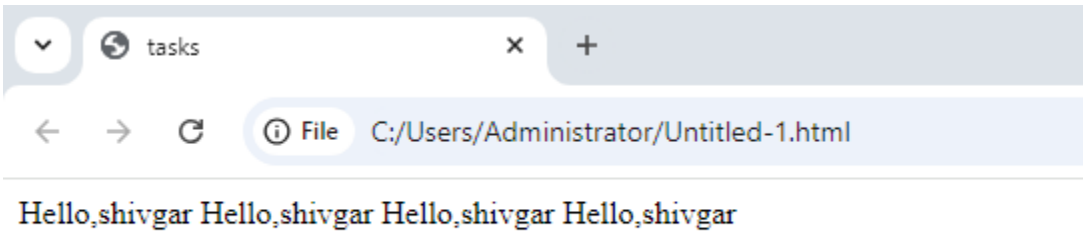


task 51:

```
<html>
<head>
    <title>tasks</title>
</head>
<body>
    <script>
      let greet= (name)=>{
          return "Hello,"+ name;
      }
      document.writeln(greet("shivgar"));
      let res=greet("shivgar");
      document.writeln(res);
      let ans= greet;
      let a=ans("shivgar");
      document.writeln(a);

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

output:

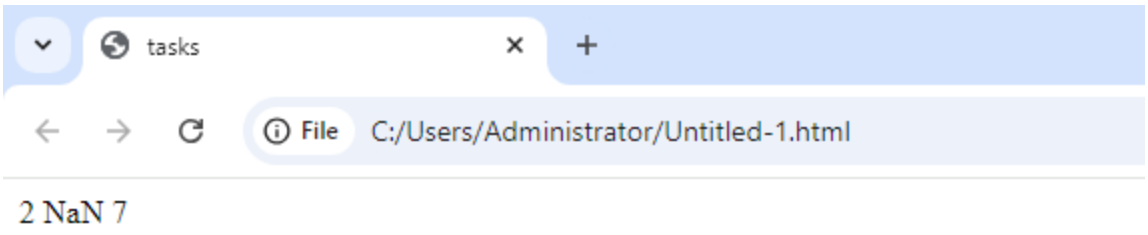


task 52:

```
<html>
<head>
	<title>tasks</title>
</head>
<body>
	<script>
	  let add= (a,b)=>{
		return a+b;
	  }
	  document.writeln(add(1,1));
	  document.writeln(add(1));
	  document.writeln(add(1,6,4));

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

output:

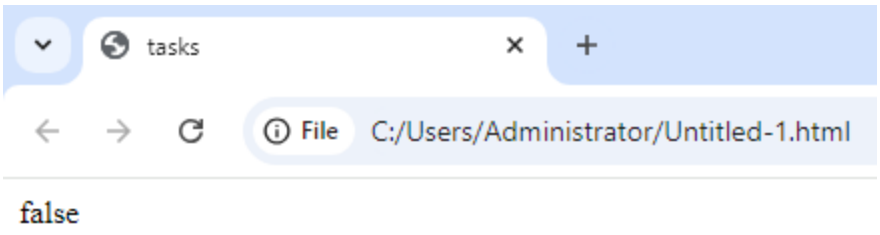


task 53:

```
<html>
<head>
    <title>tasks</title>
</head>
<body>
    <script>
      let isEven= (num)=>{
          if(num%2==0){
          return true;
      }
      else
      return false;}
      document.writeln(isEven(1));

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

output:

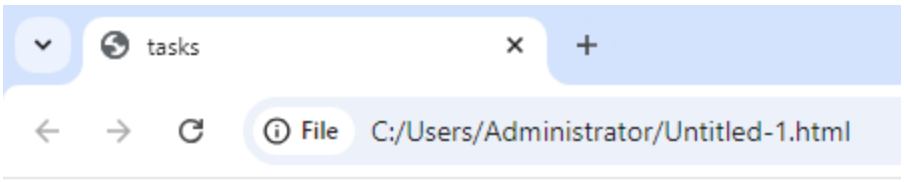


task 54:

```
<html>
<head>
	<title>tasks</title>
</head>
<body>
	<script>
	 let maxValue= (a,b)=>{
		if(a>b){
		return a;
	 }
	 else
	 return b;}
	 document.writeln(maxValue(66,99));

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

output:



task 55:

```
<html>
<head>
	<title>tasks</title>
</head>
<body>
	<script>
	const myObject={
		property:10,
		multiplyTraditional:function(){
		    return this.property*this.read();
		},
multiplyArrow:()=>{
	return myObject.property*myObject.read();

},
read:function(){
	this.num= +prompt("enter no.");
	return this.num;
}

	};
```

```
        document.writeln(myObject.multiplyTraditional());
        document.writeln(myObject.multiplyArrow());
        </script>
</body>
</html>
```

output: