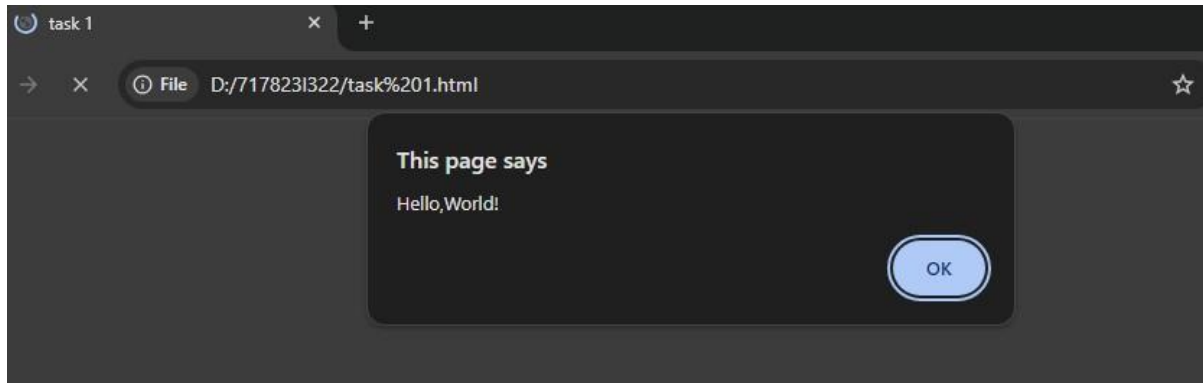


TASK 1

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



TASK 2

```
<!DOCTYPE html>
<head>
  <title>task 2</title>
</head>
<body>
  <script>
    const name="kamali";
    let no=7;
    let valid=true;
    console.log(name);
    console.log(no);
    console.log(valid);
  </script>
</body>
</html>
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

kamali
7
true
```

```
TASK 3

<!DOCTYPE html>
<head>
  <title>task 3</title>
</head>
<body>
  <script>
    var a=15;
    var b=7;
    console.log(5+10);
    console.log(17-2);
  </script>
</body>
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

15
15
→ a/b
2.142857142857143
→ a*b
105
```

TASK 4

```
<!DOCTYPE html>
<head>
  <title>task 4</title>
</head>
<body>
  <script>
    let firstname='kamali';
    let lastname='chellapandi';
    console.log(firstname+lastname);
  </script>
</body>
</html>
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

kamalichellapandi

TASK 5

```
<!DOCTYPE html>
<head>
  <title>task 5</title>
</head>
<body>
  <script>
    console.log(typeof 'hello');
    let a=5;
    console.log(typeof a);
    var b=true;
    let c=9;
    console.log(typeof b);
    console.log(typeof c);
  </script>
</body>
</html>
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

string
number
boolean
number

TASK 6

```
<!DOCTYPE html>
<head>
  <title>task 6</title>
</head>
<body>
  <!-- <p>the below variable a is in single line command</p>
  <p>Both the paragraph tag is in multi line command</p>*/-->

  <script>
    // let a=5;
    var b=6;
    console.log(b);

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

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

6

TASK 7

```
<!DOCTYPE html>
<head>
  <title>task 7</title>
</head>
<body>
  <script>
    var a=5;
    var b=9;
    var c=a+b;
    console.log(c);
    var a=5
    var b=5
    var c=a+b
    console.log(c)
  </script>
</body>
</html>
```

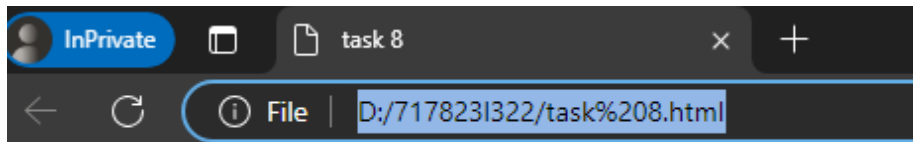
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

14

10

TASK 8

```
<!DOCTYPE html>
<head>
  <title>task 8</title>
</head>
<body>
  <script>
    let a=5;
    for(let i=0;i<a;i++)
    {
      for(let j=i+1;j<a;j++){
        document.writeln(i+j);
      }
    }
  </script>
</body>
</html>
```



1 2 3 4 3 4 5 5 6 7

TASK 9

```
<!DOCTYPE html>
<head>
  <title>task 9</title>
</head>
<body>
<script>
  let a=5,b=10,c=15;
  console.log(a+b+c);
</script>
</body>
</html>
```

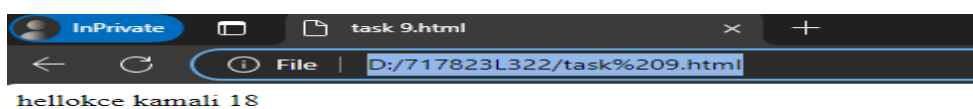
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

30

TASK 10

```
<!DOCTYPE html>
<head>
  <script>
    let a="hello";
    let b="kce";
    document.writeln(a+b);
  </script>
</head>
<body>
  <script>
    let customer={
      name:"kamali",
      age:18,

    }
    document.writeln(customer.name);
    document.writeln(customer.age);
  </script>
</body>
```

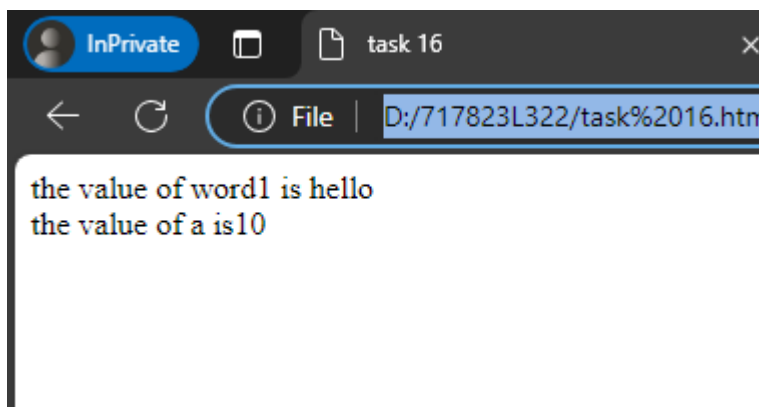


TASK 16

```
<!DOCTYPE html>
<head>
  <title>task 16</title>
</head>
<body>
  <script>
    var word1="hi";
    var word1="hello";
    document.writeln('the value of word1 is '+word1 + "<br>");

    let a=5;
    a=10;
    document.writeln('the value of a is'+a);
    const pi=3.14;
    pi=13;
    document.writeln(pi);

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



PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
> Uncaught TypeError: Assignment to constant variable.
   at <anonymous> (d:\717823L322\task 16.html:15:11)
```

TASK 17

```
<!DOCTYPE html>
<head>
  <title>task 17</title>
</head>
<body>
  <script>
    const pi=3.14;
    pi=13;
    document.writeln(pi);
  </script>
</body>
</html>
```

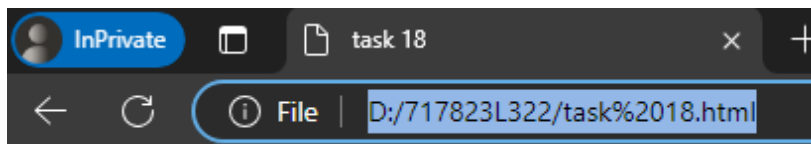
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
> Uncaught TypeError TypeError: Assignment to constant variable.
    at <anonymous> (d:\717823L322\task 16.html:15:11)
```

TASK 18

```
<!DOCTYPE html>
<head>
  <title>task 18</title>
</head>
<body>
  <script>

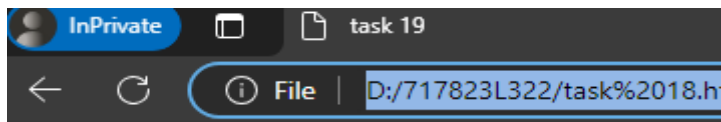
    let a;
    document.writeln('the value of a is '+a);
  </script>
</body>
</html>
```



the value of a is undefined

TASK 19

```
<!DOCTYPE html>
<head>
  <title>task 19</title>
</head>
<body>
  <script>
    document.writeln(typeof 'hello'+"<br>");
    let a=5;
    document.writeln(typeof a+"<br>");
    var b=true;
    let c=9;
    document.writeln (typeof b+"<br>");
    document.writeln(typeof c);
  </script>
</body>
</html>
```



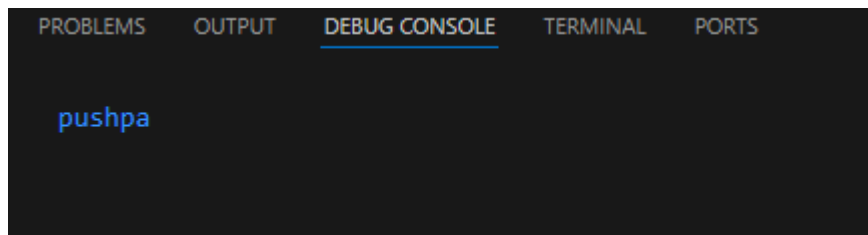
string
number
boolean
number

Task 20

```
<!DOCTYPE html>
<head>
  <title>task 20</title>
</head>
<body>
  <script>
    let oldname="pushpa";

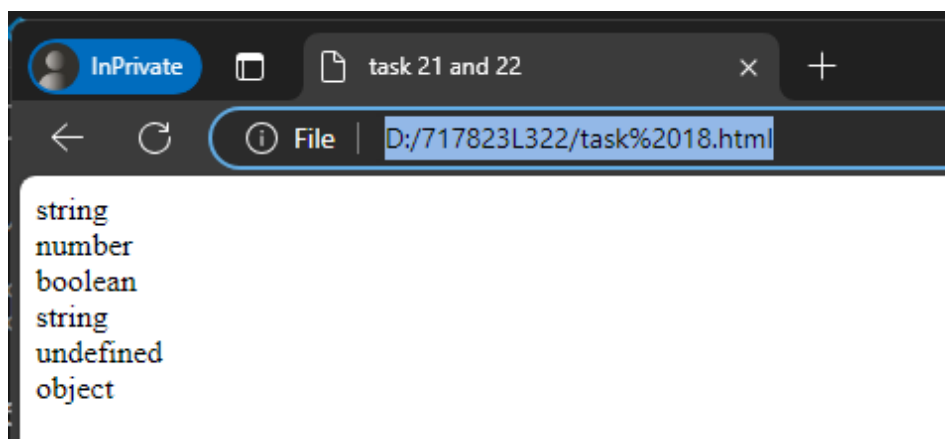
    newname=oldname;
    oldname="";

    console.log(oldname);
    console.log(newname);
  </script>
</body>
</html>
```



```
TASK 21 & 22

<!DOCTYPE html>
<head>
  <title>task 21 and 22</title>
</head>
<body>
  <script>
    document.writeln(typeof 'hello'+"<br>");
    let a=5;
    var b=true;
    let d="";
    var e;
    let customer={
      name:"kamali",
      age:18,
    }
    document.writeln(typeof a+"<br>");
    document.writeln(typeof b+"<br>");
    document.writeln(typeof d+"<br>");
    document.writeln(typeof e+"<br>");
    document.writeln(typeof customer);
  </script>
</body>
</html>
```



TASK 23

```
<!DOCTYPE html>
<head>
  <title>task 23</title>
</head>
<body>
  <script>
    const a=Symbol("%");
    console.log(typeof a);
  </script>
</body>
</html>
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

symbol

TASK 24

```
<!DOCTYPE html>
<head>
  <title>task 24</title>
</head>
<body>
  <script>
    let num1=null;
    console.log(typeof num1);
  </script>
</body>
</html>
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

object

TASK 25

```
<!DOCTYPE html>
<head>
<title>task 25</title>
</head>
<body>
<script>
function makeuser(){
var a=7;//var is function scoped
let b=13;//let is block scoped
if(a<b){
var a=10; let b=15;
console.log(a); console.log(b);
}
else{
var a=a++; let b=b++;
console.log(a); console.log(b);
}
console.log(a); console.log(b);
}
makeuser();
</script>
</body>
</html>
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

10

15

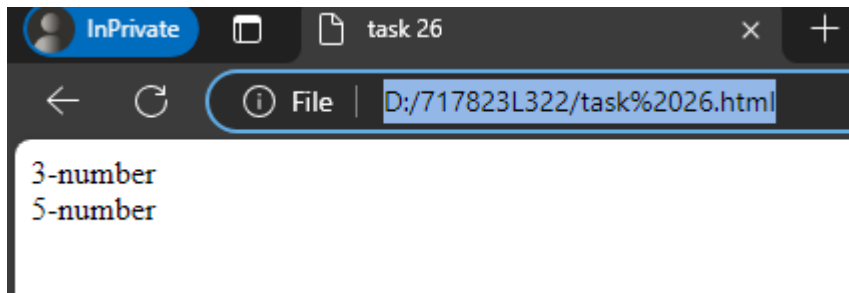
10

13

task 26

```
<!DOCTYPE html>
<head>
  <title>task 26</title>
</head>
<body>
<script>

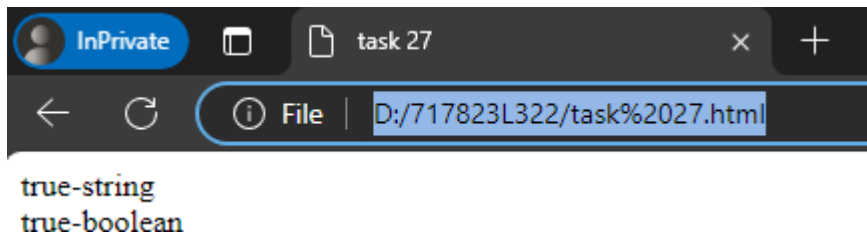
  //implicit
  let result="5"-2;
  document.writeln(result,"-",typeof
result,"<br>");
  //explicit
  let x=Number("5");
  document.writeln(x,"-",typeof x);
</script>
</body>
</html>
```



task 27

```
<!DOCTYPE html>
<head>
  <title>task 27</title>
</head>
<body>
<script>
  let x=String(true);
  document.writeln(x,"-",typeof x,"<br>");
```

```
let y=Boolean("ami");
document.writeln(y,"-",typeof y);
</script>
</body>
</html>
```



```
<!DOCTYPE html>
<head>
  <title>task 28</title>
</head>
<body>
<script>
  let a=6,b=10;
  console.log(a+b);
  console.log(a-b);
  console.log(a*b);
  console.log(a%b);
</script>
</body>
</html>
```

PROBLEMS DEBUG CONSOLE TERMINAL PORTS

```
16
-4
60
6
```

task 29

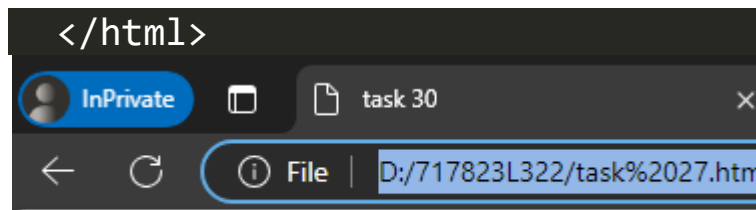
```
<!DOCTYPE html>
<head>
  <title>task 29</title>
</head>
<body>
<script>
  let a=7;
  let b=a++ + ++a;
  console.log(b);
  let x=5;
  let y=x-- + --x;
  console.log(y);
</script>
</body>
</html>
```

PROBLEMS DEBUG CONSOLE TERMINAL PORTS

16
8

task 30

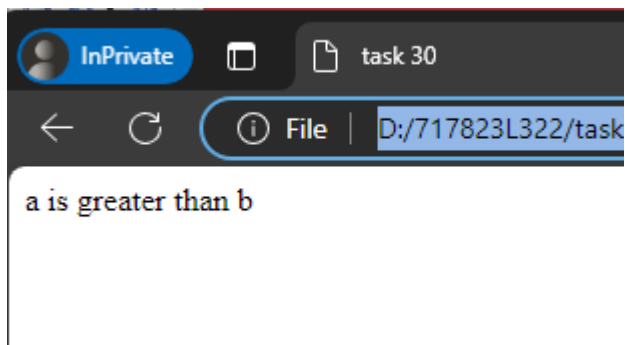
```
<!DOCTYPE html>
<head>
  <title>task 30</title>
</head>
<body>
<script>
  let a=4,b=10;
  let result=a*b%(a+b)*a-b;
  document.writeln(result);
</script>
</body>
```



38

Task 31

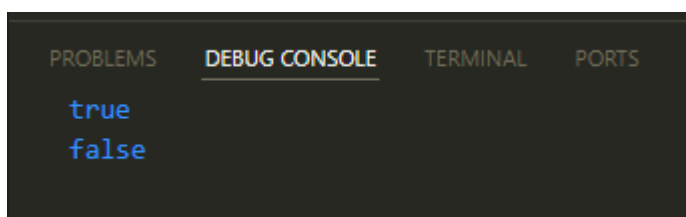
```
<!DOCTYPE html>
<body>
<script>
    let a=10,b=4;
    if(a<b){
        document.writeln("a is lesser than b");
    }
    else if(a>b){
        document.writeln("a is greater than b");
    }
    else{
        let x=5,y=5;
        if(x<=y){
            document.writeln(x+y);
        }
        else if(x>=y){
            document.writeln(x-y);
        }
        else{
            document.writeln("invalid values");
        }
    }
</script>
</body>
</html>
```

task 32

```
<!DOCTYPE html>
<head>
  <title>task 32</title>
</head>
<body>
<script>

  let a="10";
  let b=10;
  console.log(a==b);//it checks the value only
  console.log(a===b);//it check both the value and
datatype
</script>
</body>
</html>
```



task 33

```
<!DOCTYPE html>
<head>
  <title>task 33</title>
</head>
```

```

<body>
<script>
function comparestr(str1,str2){
    return str1.localeCompare(str2);
}
console.log(comparestr("apple","banana"));
console.log(comparestr("apple","apple"));
console.log(comparestr("banaba","apple"));
</script>
</body>
</html>

```

PROBLEMS DEBUG CONSOLE TERMINAL PORTS

```

-1
0
1

```

task 34

```

<!DOCTYPE html>
<head>
    <title>task 34</title>
</head>
<body>
<script>
    let a=10,b="10";
    console.log(a!=b);
    console.log(a!==b);
</script>
</body>
</html>

```

PROBLEMS DEBUG CONSOLE TERMINAL PORTS

```

false
true

```

task 35

```
<!DOCTYPE html>
<head>
  <title>task 35</title>
</head>
<body>
<script>
  let a;
  let b=null;
  console.log(a==b);
  console.log(a===b);
</script>
</body>
</html>
```

PROBLEMS

DEBUG CONSOLE

TERMINAL

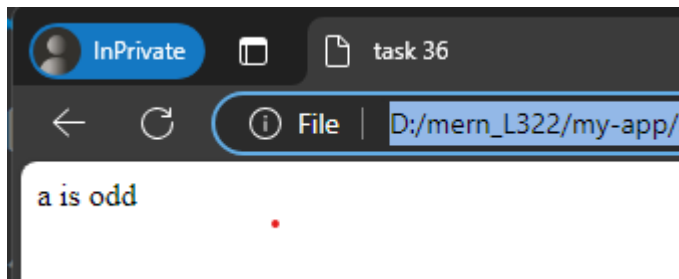
PORTS

false

true

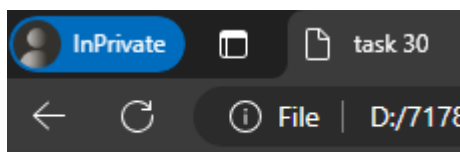
Task 36

```
<!DOCTYPE html>
<head>
<title>task 36</title>
</head>
<body>
<script>
let a=7; if(a%2==0){
document.writeln("a is even");
}
else{
    document.writeln("a is odd");
}
</script>
</body>
</html>
```



task 37

```
<!DOCTYPE html>
<head>
  <title>task 37</title>
</head>
<body>
<script>
  let a=parseInt(prompt("enter a value:")); //a=7
  if(typeof a=="number"){
    if(a>0){
      document.writeln("a is positive");
    }
    else if(a<0){
      document.writeln("a is negative");
    }
    else
      document.writeln("a is zero");
  }
</script>
</body>
</html>
```



a is positive

Task 38

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <script>
    let a=prompt("enter the value of a:",0);//a=70
    let res=(a>50)?"pass":"fail";
    console.log(res);
  </script>
</body>
</html>
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

pass

Task 39

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <script>
    let a;
    let res=(typeof a=="undefined")?"define a":(typeof a=="object")?"a is
null":"a is valid";
    console.log(res);
  </script>
</body>
</html>
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

define a

TASK 40

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <script>
    let a="hello";
    let res=(typeof a=="string")?"true":"false";
    console.log(res);
  </script>
</body>
</html>
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

true

TASK 41

```
<script>
  let a=5,b=7,c=4;
  let d=false;
  if(!d){
    console.log("boolean output");
  }
  if(a>b&&a>c){
    console.log("a is greater");
  }
  if((b+c)==11||(b+a)==12){
    console.log("valid b");
  }
</script>
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

boolean output
valid b

TASK 42

```
<script>
  let a=10;
  if(a>0&&a<10||a===10){
    console.log("a is in the range");
  }
  else{
    console.log("a is not in the range");
  }
}</script>
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

a is in the range

TASK 43

```
<script>
  let a=false;
  console.log(!a);
</script>
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

true

TASK 44

```
<script>
  let a=true&&false;
  console.log(a);
  let x=5,y=10;
  let res=(x%2!=0&&y%2==0)&&"both conditins are true";
  console.log(res);
  if(x==5||y==1){
    console.log("it termintes when it found true");
  }
}</script>
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL P

false
both conditins are true
it termintes when it found true

TASK 45

```
<script>
  let a=5;
  let b="string";
  let c=5;
  if((a>b)&&(a%2!=0)){
    console.log("a is greater and odd");
  }
  if(a==b||a==c){
    console.log("two variable value is equal");
  }
  let x=false,y=false;
  if(!x==!y) {
    console.log("not operator is true");
  }
</script>
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

two variable value is equal
not operator is true

TASK 46

```
<script>
  function add(num1,num2){
    return num1+num2;
  }
  console.log(add(5,3));
</script>
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

8

TASK 47

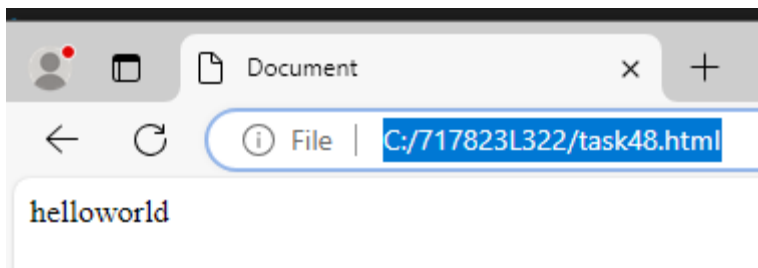
```
<script>
  function calculate(l,b){
    return l*b
  }
  console.log("the area of the rectangle is:",calculate(5,4));
</script>
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

the area of the rectangle is: 20

TASK 48

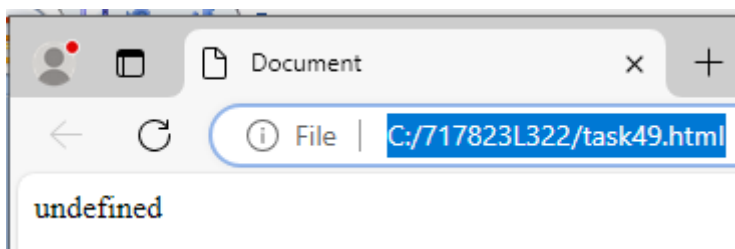
```
<script>
  function add(){
    let a="hello",b="world";
    return a+b;
  }
  document.write(add());
</script>
```



TASK 49

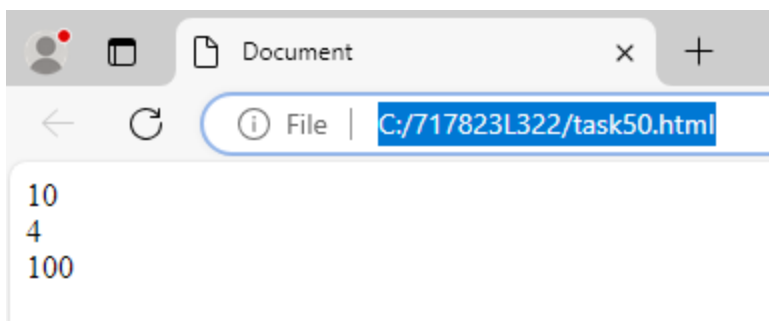
```
<script>
  function add(){
    let a="hello",b="world";

  }
  document.write(add());
</script>
```



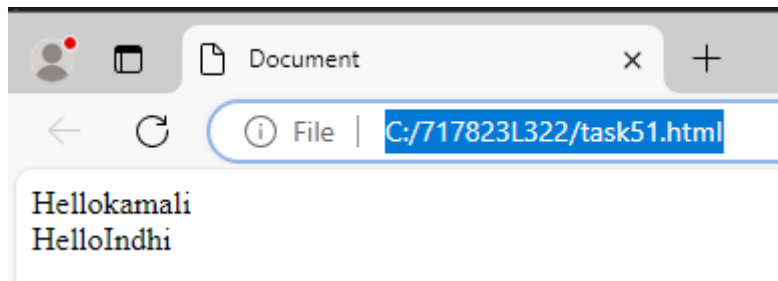
TASK 50

```
<script>
  function add(a=5,b=2){
    return a*b;
  }
  document.write(add(),"<br>");
  document.write(add(2),"<br>");
  document.write(add(10,10));
</script>
```



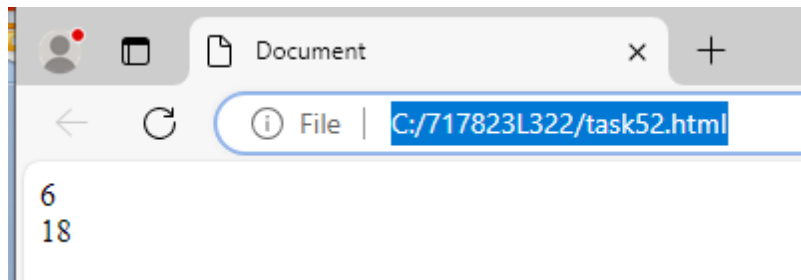
TASK 51

```
<script>
  let greet=(name)=>{
    return "Hello"+name;
  }
  document.write(greet("kamali"));
  document.write(greet("Indhi"));
</script>
```



TASK 52

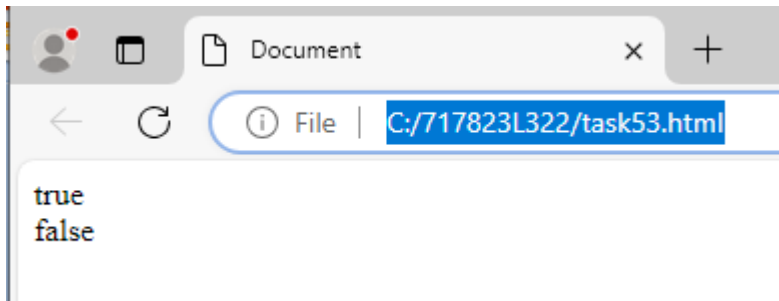
```
<script>
  let add=(num1,num2)=>{
    return num1+num2;
  }
  document.write(add(2,4),"<br>");
  document.write(add(10,8));
</script>
```



TASK 53

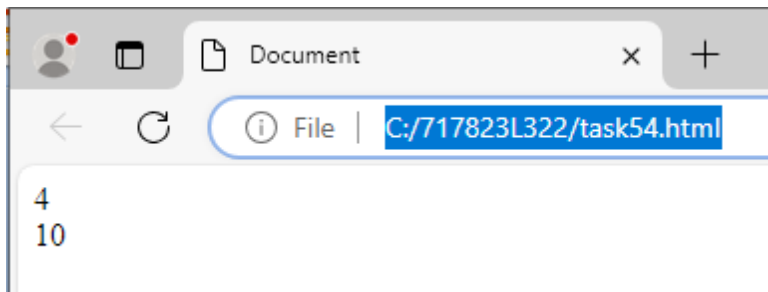
```
<script>
  let iseven=(num1)=>{
    let res=(num1%2==0)?true:false;
    return res;
  }

  document.write(iseven(4),"<br>");
  document.write(iseven(11));
</script>
```



TASK 54

```
<script>
  let maxvalue=(num1,num2)=>{
    if(num1>num2){
      return num1;
    }
    else{
      return num2;
    }
  }
  document.write(maxvalue(2,4),"<br>");
  document.write(maxvalue(10,8));
</script>
```



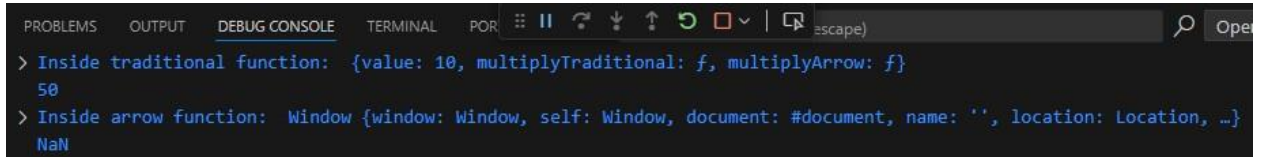
TASK 55

```
<script>
const myObject = {
  value: 10,

  multiplyTraditional: function(factor) {
    console.log('Inside traditional function: ', this);
    return this.value * factor;
  },

  multiplyArrow: (factor) => {
    console.log('Inside arrow function: ', this);
    return this.value * factor;
  }
};
```

```
console.log(myObject.multiplyTraditional(5));  
console.log(myObject.multiplyArrow(5));  
</script>
```



The screenshot shows a web browser's developer console with the 'DEBUG CONSOLE' tab selected. The console displays two log messages. The first message, 'Inside traditional function: {value: 10, multiplyTraditional: f, multiplyArrow: f}', is followed by the value '50'. The second message, 'Inside arrow function: Window {window: Window, self: Window, document: #document, name: '', location: Location, ...}', is followed by the value 'NaN'. The browser's interface includes tabs for PROBLEMS, OUTPUT, DEBUG CONSOLE, TERMINAL, and PORT, along with various debugging icons and a search bar.

```
> Inside traditional function: {value: 10, multiplyTraditional: f, multiplyArrow: f}  
50  
> Inside arrow function: Window {window: Window, self: Window, document: #document, name: '', location: Location, ...}  
NaN
```