



# Web Programming Assignment #5



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**Q1: Write an HTML code for the below form.** Let user enter a value in this form, and then convert the value from Fahrenheit to Celsius using **JS function**.

### Temperature Converter

Type a value in the Fahrenheit field to convert the value to Celsius:

Fahrenheit

Convert

Celsius:

Example

Fahrenheit

Celsius: -16.11111111111111

# Code

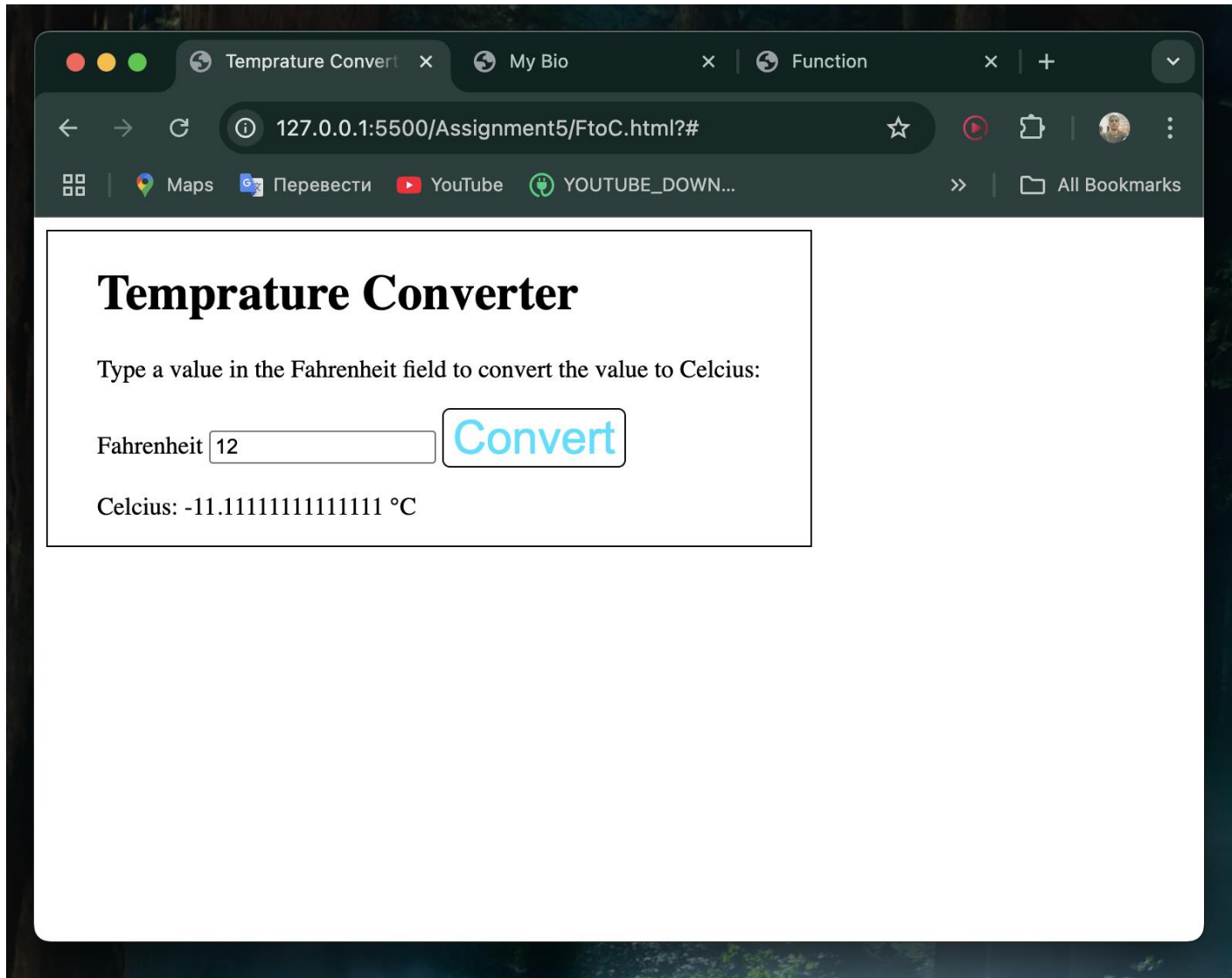
```
FtoC.html U X FtoC.css U FtoC.js U
Assignment5 > FtoC.html > ...
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <meta charset="UTF-8" />
5     <meta name="viewport" content="width=device-width, initial-scale=1.0" />
6     <title>Temprature Converter</title>
7     <link rel="stylesheet" href="FtoC.css" />
8   </head>
9   <body>
10    <form action="#">
11      <h1>Temprature Converter</h1>
12      <p>
13        Type a value in the Fahrenheit field to convert the value to Celcius:
14      </p>
15      <label for="f_input"> Fahrenheit </label>
16      <input
17        type="number"
18        step="0.001"
19        id="f_input"
20        placeholder="Fahrenheit (&deg;F)"
21      />
22      <button onclick="convertHandler(event)">Convert</button>
23      <p>Celcius: <span id="c_result"></span> &deg;C</p>
24    </form>
25  </body>
26  <script src="FtoC.js"></script>
27 </html>
28

FtoC.html U FtoC.css U X FtoC.js U
Assignment5 > FtoC.css > form
1 form {
2   width: fit-content;
3   padding: 0 2rem;
4   border: 1px solid black;
5 }
6
7 button {
8   font-size: 30px;
9   background: transparent;
10  border: 1px solid black;
11  border-radius: 5px;
12  color: rgb(0, 225, 255);
13  cursor: pointer;
14 }
15
```

FtoC.html U FtoC.css U FtoC.js U X

Assignment5 > FtoC.js > convertHandler

```
2 function FtoCConverter(f){
3   return (f - 32) * 5/9; // Calculation formula
4 }
5
6 // Handler function
7 function convertHandler(e){
8   const f_input = document.getElementById("f_input").value // Getting input value
9   document.getElementById("c_result").innerText = FtoCConverter(f_input) // Putting Calculation result
10 }
```



Output

Q2: Create a JS object with your own information and then display the information in HTML Tables as shown below.

Object creation

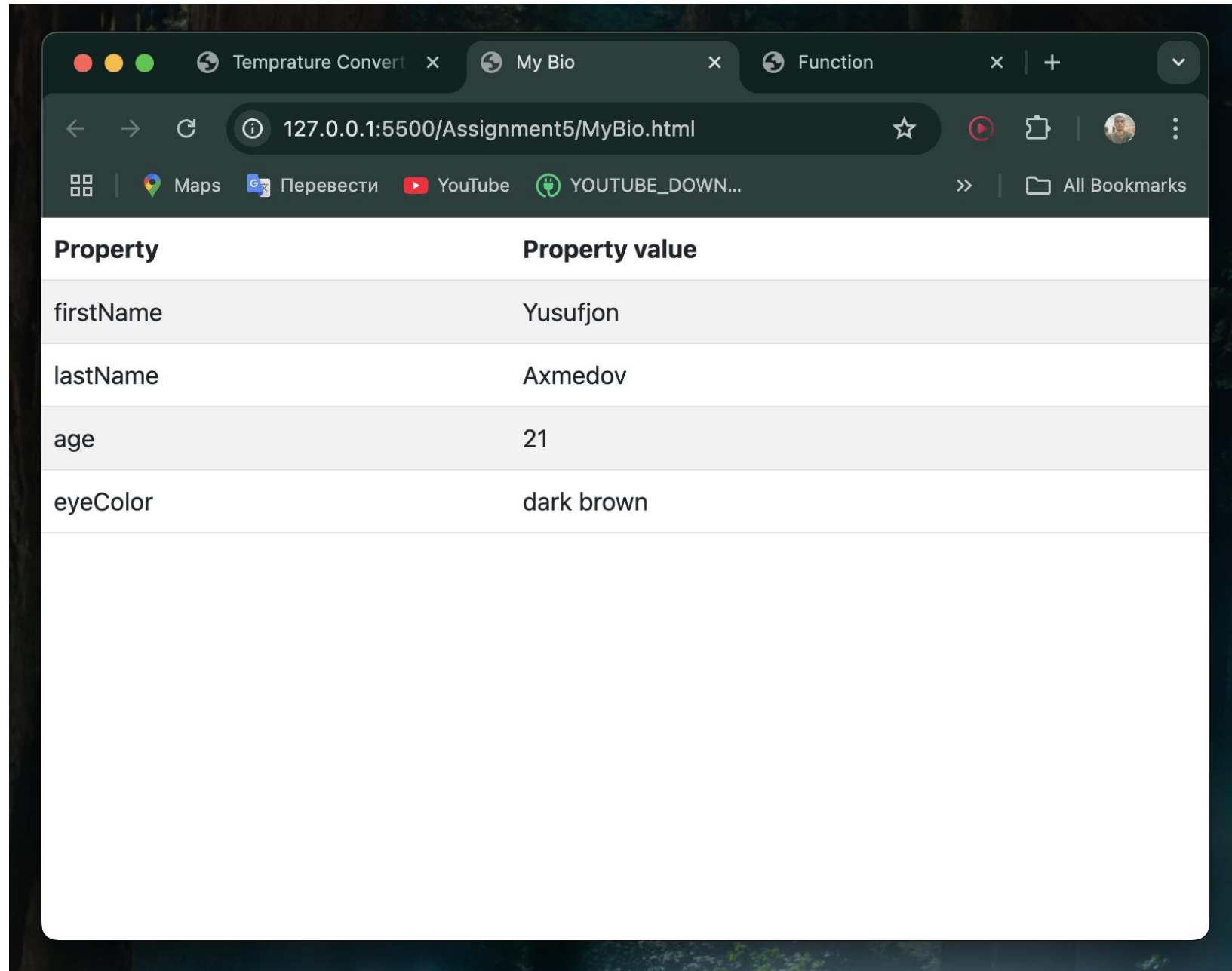
```
const person = {  
  firstName: "John",  
  lastName : "Doe",  
  id       : 5566,  
  eyeColor : blue  
};
```

Expected output

Property	Property Value
firstName	John
lastName	Doe
age	50
eyeColor	blue

# Code

```
MyBio.html U X
Assignment5 > MyBio.html > html > script
1  <!DOCTYPE html>
2  <html lang="en">
3    <head>
4      <meta charset="UTF-8" />
5      <meta name="viewport" content="width=device-width, initial-scale=1.0" />
6      <title>My Bio</title>
7      <link rel="stylesheet" href="../Assignment3/bootstrap.min.css" />
8    </head>
9    <body>
10     <table class="table table-striped">
11       <thead>
12         <tr>
13           <th>Property</th>
14           <th>Property value</th>
15         </tr>
16       </thead>
17       <tbody id="bio_data"></tbody>
18     </table>
19   </body>
20   <script>
21     const person = {
22       firstName: "Yusufjon",
23       lastName: "Axmedov",
24       age: 21,
25       eyeColor: "dark brown",
26     };
27
28     let tbody = document.getElementById("bio_data");
29
30     for (const [key, value] of Object.entries(person)) {
31       tbody.innerHTML += `<tr><td>${key}</td><td>${value}</td></tr>`;
32       console.log(`<tr><td>${key}</td><td>${value}</td></tr>`);
33     }
34   </script>
35 </html>
36
```



The image shows a web browser window with three tabs: 'Temprature Convert', 'My Bio', and 'Function'. The address bar displays '127.0.0.1:5500/Assignment5/MyBio.html'. Below the browser interface is a table with two columns: 'Property' and 'Property value'. The table contains four rows of data: 'firstName' with value 'Yusufjon', 'lastName' with value 'Axmedov', 'age' with value '21', and 'eyeColor' with value 'dark brown'.

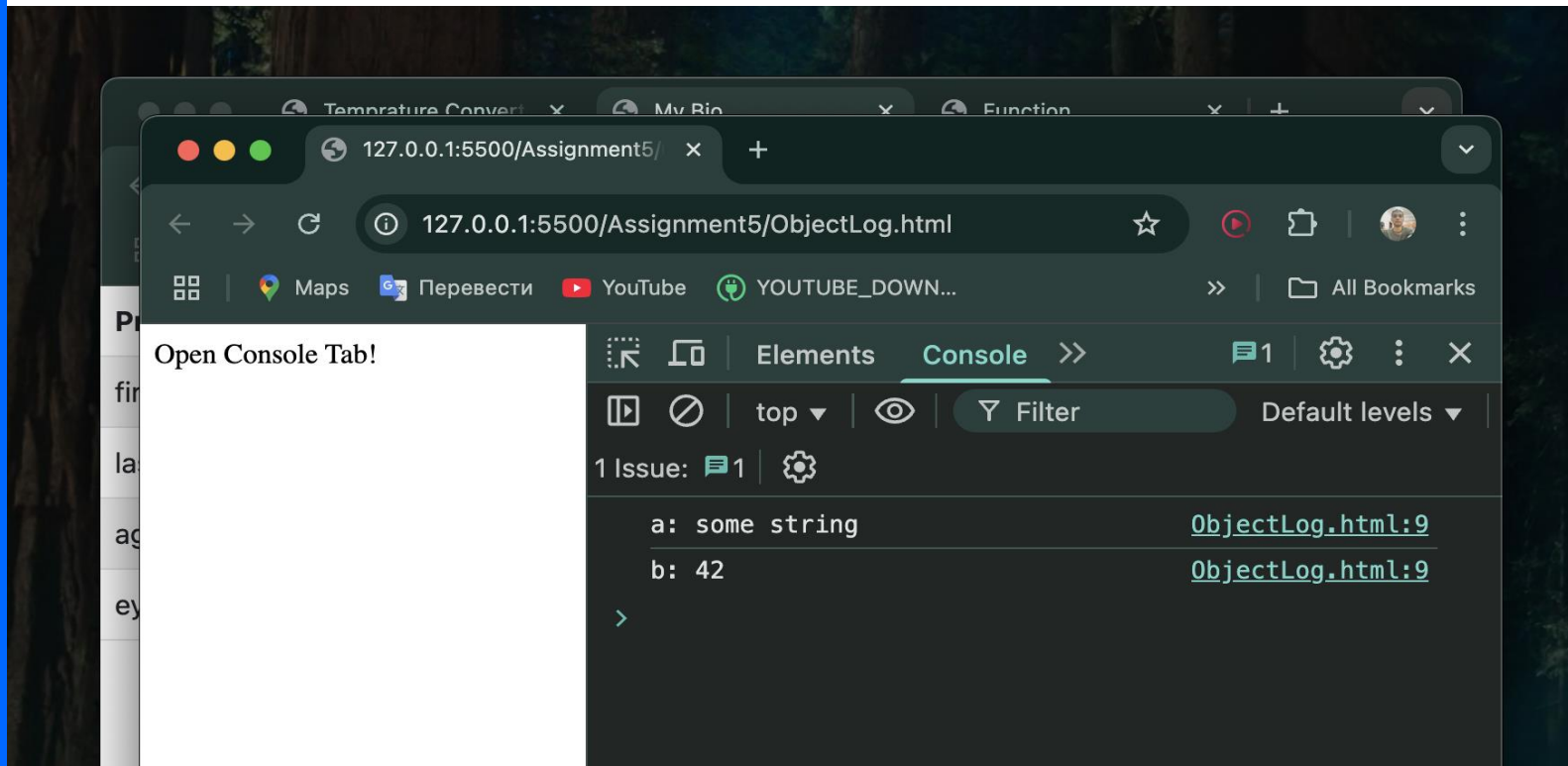
Property	Property value
firstName	Yusufjon
lastName	Axmedov
age	21
eyeColor	dark brown

# Output

Q3: Run the code below on your PCs and report the output.

```
const object1 = {  
  a: "some string",  
  b: 42,  
};  
  
for (const [key, value] of Object.entries(object1)) {  
  console.log(`${key}: ${value}`);  
}
```

*Output report:  
The properties of object1  
variable are printed into the  
Console a browser*





Q4: Why are JS functions used in web development? Please write the answer with 2~3 sentences only.

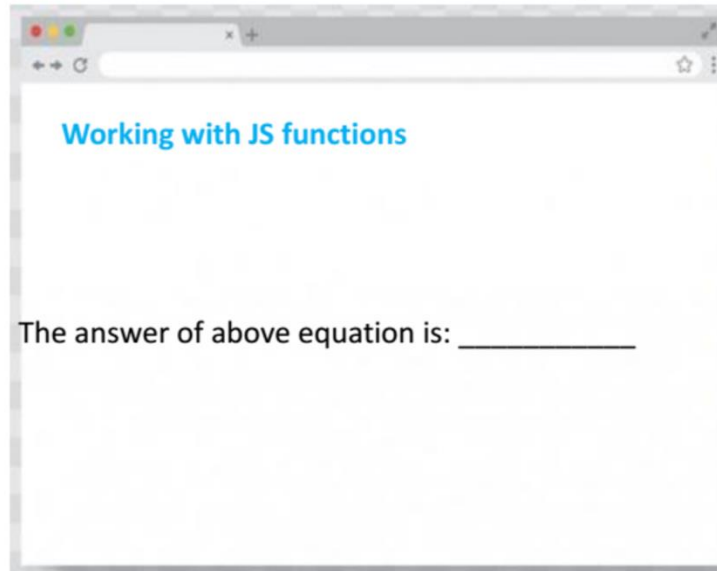
- JS functions help run specific tasks and make code reusable.
- They keep the code clean and easy to manage.
- Functions also let websites respond to user actions (click of a button, reloading page...).

Q5: Write JS function to solve the below equation and display the answer in web page as shown below.

$$Z = \frac{3x + 2y}{5b}$$

The values of variables are,

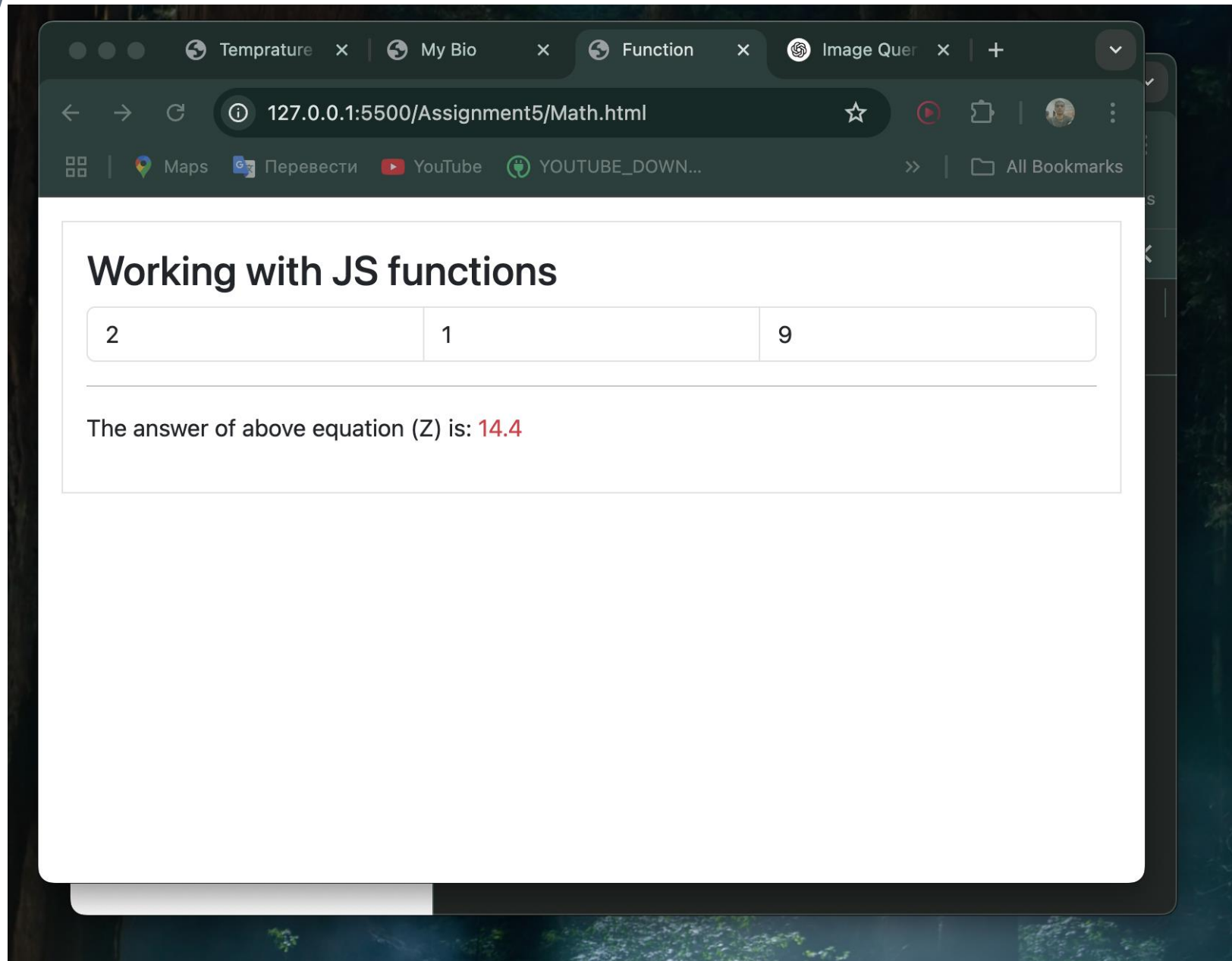
$$x = 2, y = 1, b = 9$$



Assignment5 &gt; Math.html &gt; html &gt; body &gt; form.border.m-3.p-3 &gt; div.input-

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4    <meta charset="UTF-8" />
5    <meta name="viewport" content="width=device-width, initial-scale=1
6    <title>Function</title>
7    <link rel="stylesheet" href="../Assignment3/bootstrap.min.css" />
8  </head>
9  <body>
10   <form action="#" class="border m-3 p-3">
11     <h2>Working with JS functions</h2>
12     <div class="input-group">
13       <input
14         type="number"
15         id="x"
16         step="any"
17         oninput="_math_functions.inputHandler(event)"
18         class="form-control"
19         placeholder="Enter X's value"
20       />
21       <input
22         type="number"
23         id="y"
24         step="any"
25         oninput="_math_functions.inputHandler(event)"
26         class="form-control"
27         placeholder="Enter Y's value"
28       />
29       <input
30         type="number"
31         id="b"
32         step="any"
33         oninput="_math_functions.inputHandler(event)"
34         class="form-control"
35         placeholder="Enter B's value"
36       />
37     </div>
38     <hr />
39     <p>
40       The answer of above equation (Z) is:
41       <span class="text-danger" id="result"></span>
42     </p>
43   </form>
44 </body>
```

```
39   <p>
40     The answer of above equation (Z) is:
41     <span class="text-danger" id="result"></span>
42   </p>
43 </form>
44 </body>
45 <script>
46   const _math_functions = {
47     x: 0,
48     y: 0,
49     b: 0,
50     z_equation: function () {
51       document.getElementById("result").innerText =
52         ((3 * this.x + 2 * this.y) / 5) * this.b;
53     },
54     inputHandler: function (event) {
55       this[event.target.id] = parseFloat(event.target.value) || 0;
56       this.z_equation();
57     },
58   };
59 </script>
60 </html>
61
```



Output