

Web Application Development

Exercise 2: JavaScript

Question 1: Write a JavaScript program to convert temperatures to and from Celsius and Fahrenheit:

- Conversion Formula: $c/5 = (f-32)/9$ where c is temperature in Celsius and f is temperature in Fahrenheit.

Question 2: Write a JavaScript program to find the largest of five numbers. Display an alert box to show the result.

Question 3: Write a JavaScript program that iterates from 1 to 15. For each iteration, it will check if the current number is odd or even, and display a message to the screen. The output should be:

“1 is odd”
“2 is even”

Question 4: Use HTML/CSS/ JavaScript to create a form as the following.

Sign Up

Username:	<input type="text"/>
Password:	<input type="password"/>
Re-type Password:	<input type="password"/>
	<input type="button" value="Reset"/> <input type="button" value="Submit"/>

Write a JavaScript function that checks whether two entered passwords are identical. The function is called when users click the “Submit” button.

Question 5: Write a JavaScript program to calculate multiplication and division of two numbers:

- HTML form should be used to get inputs from user
- The interface of the program should look as follows:

Multiply and Divide two numbers:

1st Number :

2nd Number:

The Result is :

Question 6: Find all h1 elements that are children of a div element and apply a background to them:

- Sample Input HTML File:

```
<body>
  <h1>Introduction</h1>
  <div>
    <h1>About HTML</h1>
    <h1>About CSS</h1>
  </div>
  <h1>About JavaScript</h1>
</body>
```

Question 7: Attach a function to the blur event. The blur event occurs when the following <input> Field1 loses focus:

```
<body>
  <form>
    <input id="field1" type="text" value="Field 1">
    <input id="field2" type="text" value="Field 2">
  </form>
</body>
```

Question 8: Create a web page named task8.html, containing three links to other pages:

- Use property text-decoration to remove the underlines
- If a link is visited, then its color becomes red
- Change the color of the links to green when the mouse is over

Question 9: Count the number of milliseconds between the two click events on a paragraph. Following are the sample data:

```
<body>
  <h1>Heading1</h1>
  <h2>Heading2</h2>
  <p>Paragraph</p>
  <button>Button</button>
  <div id="log"></div>
</body>
```