

Ex. No. 5	JAVASCRIPT – DOM ELEMENTS AND EVENTS
Date of Exercise	29/08/2025
Youtube link	

Aim:

To develop a web page that demonstrates the use of JavaScript DOM elements and event handling for interactive user experiences.

Description:

The Document Object Model (DOM) represents the structure of an HTML document as a tree of objects. JavaScript can access and manipulate these objects dynamically to modify webpage content, structure, or style in real-time.

In this exercise, we use DOM methods such as:

- `document.getElementById()` – to access an element by its ID.
- `document.querySelector()` – to select elements using CSS selectors.
- `innerHTML` and `style` – to modify content and styles dynamically.

We also demonstrate event handling responding to user interactions like button clicks, mouse movements, and text input changes. Common events include:

- `onclick` – triggered when a button or element is clicked.
- `onmouseover` and `onmouseout` – triggered when the mouse enters or leaves an element.
- `onchange` – triggered when an input value changes.

By combining DOM manipulation and event handling, developers can create interactive web pages that respond instantly to user actions, improving usability and interactivity.

Program:

```
<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Calculator</title>

    <link rel="stylesheet" href=".//styles.css">

    <script src=".//script.js"></script>

</head>

<body>

    <div>

        <h2>Simple Calculator</h2>

        <input type="number" name="" id="num1" placeholder="Enter first number">

        <input type="number" name="" id="num2" placeholder="Enter second number">

        <br>

        <button onclick="add()">+ add</button>

        <button onclick="subtract()">- Subtract</button>

        <button onclick="multiply()">* Multiply</button>

        <button onclick="divide()">/ Divide</button>

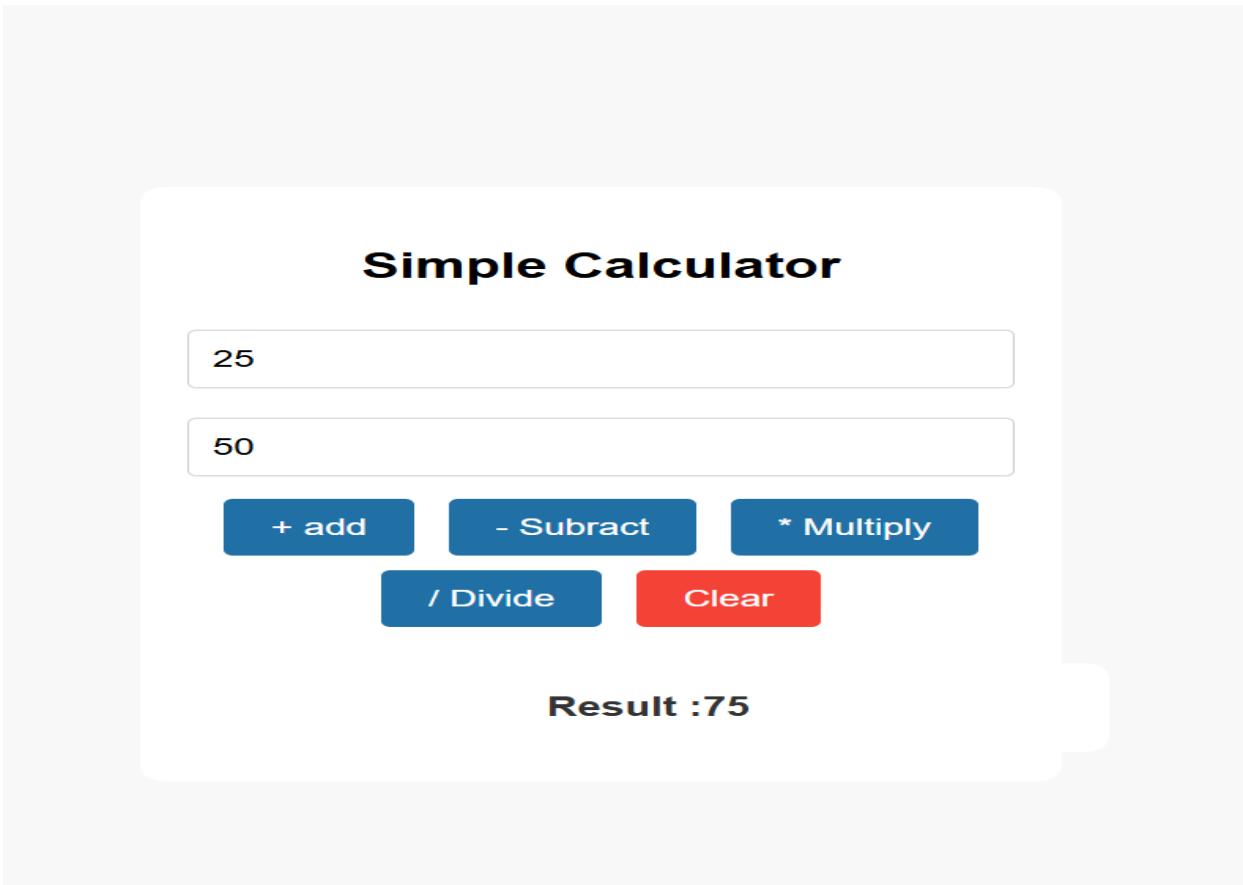
        <button onclick="Clear()" class="clear">Clear</button>

    </div>

</body>
```

```
<br>
<div id="result"></div>
</div>
</body>
</html>
```

Output:



Result:

Successfully created a web page that demonstrates the javascript dom elements and executed.