

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

**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>

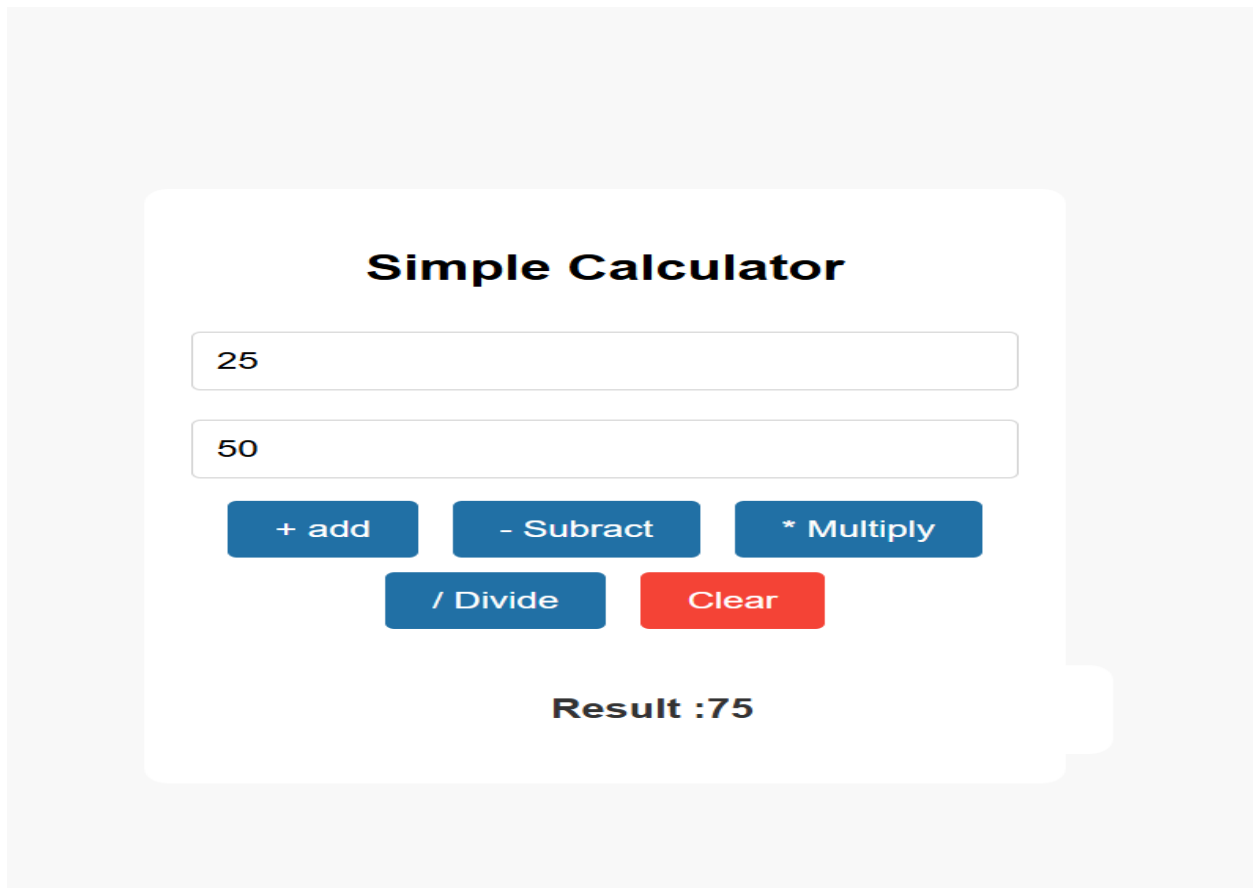
    <button onclick="multiply()">* Multiply</button>

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

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

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

### Output:



### Result:

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