Experiment 12

Aim

Write a program using Javascript for Web Page to display browsers information.

Theory

The navigator object contains information about the browser.

The navigator object can be written without the window prefix.

Code

```html
<!DOCTYPE html>
<html>
<head>
    <title>Browser Information</title>
    <script>
        function displayBrowserInfo() {
            var browserName = navigator.appName;
            var browserVersion = navigator.appVersion;
            var browserCodeName = navigator.appCodeName;
            Element = document.getElementById("browserInfo");
            Element.innerHTML = "<p>Browser Name: " + browserName + "</p>" + "
<p>Browser Version: " + browserVersion + "</p>" + "<p>Browser Code Name: " +
browserCodeName + "</p>";
        }
    </script>
</head>
<body onload="displayBrowserInfo()">
    <h1>Browser Information</h1>
    <div id="browserInfo"></div>
</body>
</html>
```

Output

Browser Information

Browser Name: Netscape

Browser Version: 5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/113.0.0.0 Safari/537.36 Edg/113.0.1774.42

Browser Code Name: Mozilla

Experiment 13

Aim

Design the scientific calculator and make event for each button using JavaScript.

Code

```
<!DOCTYPE html>
<html><head><title>Scientific Calculator</title>
    <style>* {
            box-sizing: border-box;
        }

        body {
            font-family: Arial, sans-serif;
            margin: 0;
            padding: 0;
        }

        .container {
            max-width: 400px;
            margin: 0 auto;
            padding: 20px;
            background-color: #f2f2f2;
            border-radius: 5px;
            box-shadow: 0 0 10px rgba(0, 0, 0, 0.2);
        }

        h1 {
            text-align: center;
        }

        input {
            display: block;
            width: 100%;
            margin-bottom: 10px;
            padding: 10px;
            font-size: 18px;
            border-radius: 5px;
            border: none;
            background-color: #fff;
            box-shadow: 0 0 5px rgba(0, 0, 0, 0.2);
            text-align: right;
        }

        button {
            display: inline-block;
            width: 50%;
            margin: 5px;
            padding: 10px;
```

```
        font-size: 18px;
        border-radius: 5px;
        border: none;
        background-color: #4CAF50;
        color: #fff;
        cursor: pointer;
        box-shadow: 0 0 5px rgba(0, 0, 0, 0.2);
    }

    button:hover {
        background-color: #3e8e41;
    }

    .row::after {
        content: "";
        display: table;
        clear: both;
    }

    .col {
        float: left;
        width: 25%;
    }

    .clear {
        background-color: #ff6666;
    }

    .equal {
        background-color: #66ccff;
    }</style></head>
<body><div class="container">
    <h1>Scientific Calculator</h1>
    <input type="text" id="display" disabled>
    <div class="row">
        <div class="col"><button onclick="clearDisplay()"
class="clear">C</button></div>
        <div class="col"><button onclick="deleteCharacter()">D</button></div>
        <div class="col"><button onclick="insertCharacter('**')">**</button>
</div>
        <div class="col"><button onclick="insertCharacter('/')">/</button>
</div>
    </div>
    <div class="row">
        <div class="col"><button onclick="insertCharacter('7')">7</button>
</div>
        <div class="col"><button onclick="insertCharacter('8')">8</button>
</div>
        <div class="col"><button onclick="insertCharacter('9')">9</button>
</div>
        <div class="col"><button onclick="insertCharacter('*')">*</button>
</div>
    </div>
    <div class="row">
```

```html
            <div class="col"><button onclick="insertCharacter('4')">4</button>
</div>
            <div class="col"><button onclick="insertCharacter('5')">5</button>
</div>
            <div class="col"><button onclick="insertCharacter('6')">6</button>
</div>
            <div class="col"><button onclick="insertCharacter('-')">-</button>
</div>
        </div>
        <div class="row">
            <div class="col"><button onclick="insertCharacter('1')">1</button>
</div>
            <div class="col"><button onclick="insertCharacter('2')">2</button>
</div>
            <div class="col"><button onclick="insertCharacter('3')">3</button>
</div>
            <div class="col"><button onclick="insertCharacter('+')">+</button>
</div>
        </div>
        <div class="row">
            <div class="col"><button onclick="insertCharacter('0')">0</button>
</div>
            <div class="col"><button onclick="insertCharacter('.')">.</button>
</div>
            <div class="col"><button onclick="insertCharacter('(')">(</button>
</div>
            <div class="col"><button onclick="insertCharacter(')')">)</button>
</div>
        </div>
        <div class="row">
            <div class="col"><button
onclick="insertCharacter('Math.sin(')">sin</button></div>
            <div class="col"><button
onclick="insertCharacter('Math.cos(')">cos</button></div>
            <div class="col"><button
onclick="insertCharacter('Math.tan(')">tan</button></div>
            <div class="col"><button
onclick="insertCharacter('Math.sqrt(')">sqrt</button></div>
        </div>
        <div class="row">
            <div class="col"><button onclick="calculate()" class="equal">=
</button></div>
        </div>
    </div>
    <script>
        function insertCharacter(char) {
            document.getElementById("display").value += char;
        }

        function deleteCharacter() {
            var display = document.getElementById("display");
            display.value = display.value.slice(0, -1);
        }
```
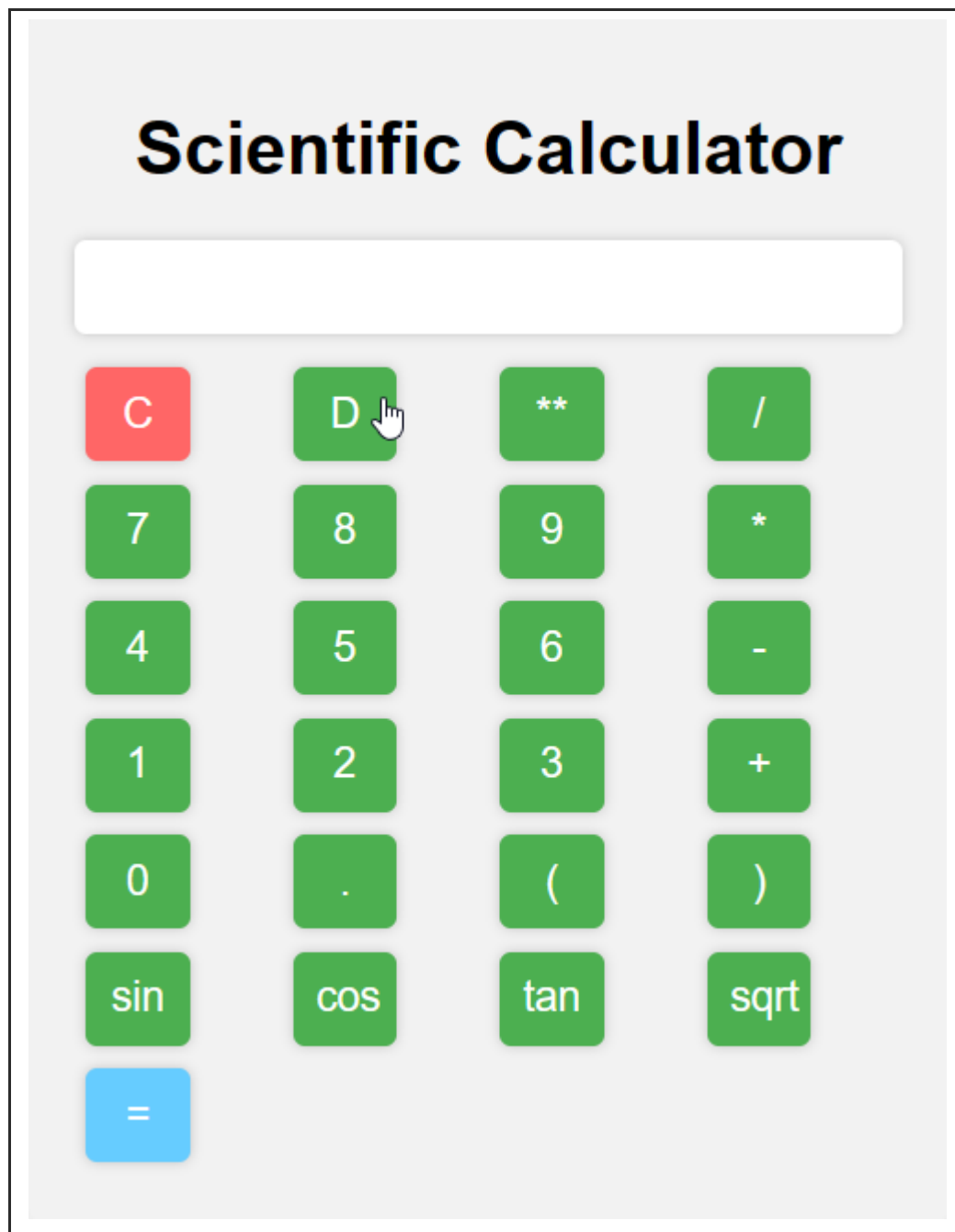
```
        function clearDisplay() {
            document.getElementById("display").value = "";
        }

        function calculate() {
            var display = document.getElementById("display");
            var result = eval(display.value);
            display.value = result;
        }
    </script>
</body></html>
```

Output

Scientific Calculator

C	D	**	/
7	8	9	*
4	5	6	-
1	2	3	+
0	.	(	)
sin	cos	tan	sqrt
=			

Experiment 14

Aim

Use frames such that page is divided into frames 20% on left to show contents of pages, 60% in center to show body of page, remaining on right to show remarks.

Code

```
<!DOCTYPE html>
<html>

<head>
    <title>My Page</title>
    <style>
        .container {
            display: grid;
            grid-template-columns: 20% 60% 20%;
            grid-gap: 20px;
            padding: 20px;
        }

        .left {
            background-color: #f2f2f2;
            padding: 10px;
        }

        .center {
            background-color: #fff;
            padding: 10px;
        }

        .right {
            background-color: #f2f2f2;
            padding: 10px;
        }
    </style>
</head>

<body>
    <div class="container">
        <div class="left">
            <h2>Contents</h2>
            <ul>
                <li><a href="#">Page 1</a></li>
                <li><a href="#">Page 2</a></li>
                <li><a href="#">Page 3</a></li>
            </ul>
        </div>
        <div class="center">
            <h1>Welcome to My Page</h1>
```

```html
            <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed ac est
non lectus vestibulum commodo.
                Integer ut libero vitae dolor facilisis euismod. Nam vitae lacus
euismod, bibendum ipsum vel, aliquet
                tellus. Integer non arcu sit amet orci viverra euismod. Ut auctor,
eros et facilisis commodo, nunc
                sapien hendrerit velit, vel tempus enim tellus ut metus. Sed
eleifend, quam vitae molestie tempus, nisl
                mauris aliquam velit, eu commodo nunc augue non nulla. Maecenas
sed nisi eu orci laoreet tempor.
                Vestibulum ante ipsum primis in faucibus orci luctus et ultrices
posuere cubilia curae; Donec sagittis
                tristique lorem, et auctor libero pretium eu. Sed placerat, turpis
at vestibulum egestas, purus sem
                malesuada sapien, vel euismod dolor arcu vel nunc. </p>
        </div>
        <div class="right">
            <h2>Remarks</h2>
            <ul>
                <li>Comment 1</li>
                <li>Comment 2</li>
                <li>Comment 3</li>
            </ul>
        </div>
    </div>
</body>

</html>
```

Output

Contents

Welcome to My Page

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed ac est non lectus vestibulum commodo. Integer ut libero vitae dolor facilisis euismod. Nam vitae lacus euismod, bibendum ipsum vel, aliquet tellus. Integer non arcu sit amet orci viverra euismod. Ut auctor, eros et facilisis commodo, nunc sapien hendrerit velit, vel tempus enim tellus ut metus. Sed eleifend, quam vitae molestie tempus, nisl mauris aliquam velit, eu commodo nunc augue non nulla. Maecenas sed nisi eu orci laoreet tempor. Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia curae; Donec sagittis tristique lorem, et auctor libero pretium eu. Sed placerat, turpis at vestibulum egestas, purus sem malesuada sapien, vel euismod dolor arcu vel nunc.

Remarks

- Comment 1
- Comment 2
- Comment 3

Experiment 15

Aim

Write an HTML page that contains selection box with list C319.5 of countries, when the user selects country, its capital should be printed next to the list; Add CSS to customize the properties of the font of the capital (color, bold and font size).

Code

```html
<!DOCTYPE html>
<html>

<head>
    <title>Country Capitals</title>
    <style>
        #capital {
            font-weight: bold;
            font-size: 24px;
            color: blue;
        }
    </style>
</head>

<body>
    <h1>Country Capitals</h1>
    <select id="country" onchange="displayCapital()">
        <option value="">Select a country</option>
        <option value="Canada">Canada</option>
        <option value="France">France</option>
        <option value="Germany">Germany</option>
        <option value="Japan">Japan</option>
        <option value="United Kingdom">United Kingdom</option>
    </select>
    <p>The capital of <span id="selected-country"></span> is <span id="capital">
</span>.</p>

    <script>
        function displayCapital() {
            var country = document.getElementById("country").value;
            var capital = "";

            switch (country) {
                case "Canada":
                    capital = "Ottawa";
                    break;
                case "France":
                    capital = "Paris";
                    break;
                case "Germany":
                    capital = "Berlin";
```

```
                break;
            case "Japan":
                capital = "Tokyo";
                break;
            case "United Kingdom":
                capital = "London";
                break;
            case "United States":
                capital = "Washington, D.C.";
                break;
            default:
                capital = "";
                break;
        }

        document.getElementById("selected-country").innerHTML = country;
        document.getElementById("capital").innerHTML = capital;
    }
</script>
</body>

</html>
```

Output