Experiment – 15

Aim:- To design the scientific calculator and make event for each button using java script.

HTML Code:-

```html
<html>
<head>
    <title>Scientific Calculator</title>
    <link rel="stylesheet" type="text/css" href="./styles.css">
</head>
<body>
    <div class="calculator">
        <input type="text" id="result" disabled>
        <button onclick="clearResult()">C</button>
        <button onclick="appendValue('(')">(</button>
        <button onclick="appendValue(')')">)</button>
        <button onclick="appendValue('/')">/</button>
        <button onclick="appendValue('7')">7</button>
        <button onclick="appendValue('8')">8</button>
        <button onclick="appendValue('9')">9</button>
        <button onclick="appendValue('*')">*</button>
        <button onclick="appendValue('4')">4</button>
        <button onclick="appendValue('5')">5</button>
        <button onclick="appendValue('6')">6</button>
        <button onclick="appendValue('-')">-</button>
        <button onclick="appendValue('1')">1</button>
        <button onclick="appendValue('2')">2</button>
        <button onclick="appendValue('3')">3</button>
        <button onclick="appendValue('+')">+</button>
        <button onclick="appendValue('0')">0</button>
        <button onclick="appendValue('.')">.</button>
        <button onclick="calculateResult()">=</button>
        <button onclick="appendValue('Math.PI')">π</button>
        <button onclick="appendValue('Math.E')">e</button>
        <button onclick="appendValue('Math.sqrt(')">√</button>
        <button onclick="appendValue('Math.pow(')">^</button>
        <button onclick="appendValue('#')">#</button>
    </div>
        <script src="./script.js"></script>
</body>
</html>
```

CSS Code:-

```css
.calculator {

    width: 280px;
    height: 400px;
    margin: 0 auto;
    border: 2px solid #06d0f8;
    border-radius: 10px;
    display: grid;
    grid-template-columns: repeat(4, 1fr);
    grid-gap: 5px;
    padding: 10px;
}
input[type="text"] {
    grid-column: 1 / span 4;
    font-size: 24px;
    text-align: right;
    background-color: #08e7d893;
    padding: 10px;
}
button {
    background-color: #08e7d893;
    border: 1px solid #0bfaee;
    border-radius: 5px;
    font-size: 20px;
    cursor: pointer;
    outline: none;
    transition: background-color 0.3s ease-in-out;
}
button:hover {
    background-color: #e71313;
    border: 1px solid #fa4b0b;
}
```

JS Code:-

```js
let result = document.getElementById('result');
function appendValue(value) {
    result.value += value;
}
function clearResult() {
    result.value = '';
}
function calculateResult() {
    let expression = result.value;
    let answer = eval(expression);
    result.value = answer;
}
```

Output:-

		100069	
C	(	)	/
7	8	9	*
4	5	6	-
1	2	3	+
0	.	=	π
e	√	^	#