

**EXPERIMENT NO 4****Working on Functions & Button Controls in JavaScript**

**AIM: Perform a CSS based Calculator.**

**Question (1). Develop a Calculator.**

**SOURCE CODE:****HTML**

```
<!DOCTYPE html>
<head>

    <meta http-equiv="X-UA-Compatible" content="Chrome">

    <title>Basic Calculator</title>
    <style>
        td{text-align: center;}
        input{text-align: center; max-height: 40%;max-width: 100%;border:
none;background-
color: black;color: white;}
        button{ cursor: pointer; border: none;color: white;background-color:
gray;max-width:
25px;max-height: 25px;box-shadow: 1px 1px 8px 2px honeydew;}
        .btn_gray{color: black;background-color: gainsboro;box-shadow: 1px 1px 8px
2px
gray;}
        .btn_yellow{color: white;background-color: orange;box-shadow: 1px 1px 8px 2px
yellow;}
        div{display:block;background-color: black;max-width: 20%;}
    </style>
</head>

<body>
    <p align="right">
        <a href="../index.htm"><button
onmouseover="this.style.color='red'">R</button></a>
    </p>
    <br><center>
        <div><center>
            <table>
                <tr>
                    <td colspan=4 rowspan=3><input type="text" id="num"></td>
                </tr>
                <tr></tr>
                <tr></tr>
            </table>
        </div>
    </center>
</body>
```

```

        <tr>
            <td><button id="clear" class="btn_gray">AC</button></td>
            <td><button id="neg" class="btn_gray">+/-</button></td>
            <td><button id="percent" class="btn_gray">%</button></td>
            <td><button id="div" class="btn_yellow">/</button></td>
        </tr>
        <tr>
            <td><button id="7">7</button></td>
            <td><button id="8">8</button></td>
            <td><button id="9">9</button></td>
            <td><button id="mul" class="btn_yellow">*</button></td>
        </tr>
        <tr>
            <td><button id="4">4</button></td>
            <td><button id="5">5</button></td>
            <td><button id="6">6</button></td>
            <td><button id="sub" class="btn_yellow">-</button></td>
        </tr>
        <tr>
            <td><button id="1">1</button></td>
            <td><button id="2">2</button></td>
            <td><button id="3">3</button></td>
            <td><button id="add" class="btn_yellow">+</button></td>
        </tr>
        <tr>
            <td><button id="0">0</button></td>
            <td><button id="00">00</button></td>
            <td><button id="decimal">.</button></td>
            <td><button id="equal" class="btn_yellow">=</button></td>
        </tr>
    </table><br>
</center>
</div></center>
<script>
    var n1, n2, f1, f2, result, choice;
    let btn1 = document.getElementById('1');
    let btn2 = document.getElementById('2');
    let btn3 = document.getElementById('3');
    let btn4 = document.getElementById('4');
    let btn5 = document.getElementById('5');
    let btn6 = document.getElementById('6');
    let btn7 = document.getElementById('7');
    let btn8 = document.getElementById('8');
    let btn9 = document.getElementById('9');
    let btn0 = document.getElementById('0');
    let btn00 = document.getElementById('00');
    let btnclear = document.getElementById('clear');
    let btnneg = document.getElementById('neg');
    let btnpercent = document.getElementById('percent');
    let btndiv = document.getElementById('div');
    let btnmul = document.getElementById('mul');
    let btnadd = document.getElementById('add');
    let btndsub = document.getElementById('sub');
    let btnequal = document.getElementById('equal');
    let btndeci = document.getElementById('decimal');

```

```
        btn1.addEventListener('click', function () {
            document.getElementById("num").value =
document.getElementById("num").value +
"1";
        });
        btn2.addEventListener('click', function () {
            document.getElementById("num").value =
document.getElementById("num").value +
"2";
        });
        btn3.addEventListener('click', function () {
            document.getElementById("num").value =
document.getElementById("num").value +
"3";
        });
        btn4.addEventListener('click', function () {
            document.getElementById("num").value =
document.getElementById("num").value +
"4";
        });
        btn5.addEventListener('click', function () {
            document.getElementById("num").value =
document.getElementById("num").value +
"5";
        });
        btn6.addEventListener('click', function () {
            document.getElementById("num").value =
document.getElementById("num").value +
"6";
        });
        btn7.addEventListener('click', function () {
            document.getElementById("num").value =
document.getElementById("num").value +
"7";
        });
        btn8.addEventListener('click', function () {
            document.getElementById("num").value =
document.getElementById("num").value +
"8";
        });
        btn9.addEventListener('click', function () {
            document.getElementById("num").value =
document.getElementById("num").value +
"9";
        });
        btn0.addEventListener('click', function () {
            document.getElementById("num").value =
document.getElementById("num").value +
"0";
        });
        btn00.addEventListener('click', function () {
            document.getElementById("num").value =
document.getElementById("num").value +
"00";
        });
```

```
});

btnadd.addEventListener('click', function() {
    n1 = parseInt(document.getElementById("num").value);
    document.getElementById("num").value = " ";
    choice = 1
})
btnsub.addEventListener('click', function() {
    n1 = parseInt(document.getElementById("num").value);
    document.getElementById("num").value = " ";
    choice = 2
})
btnmul.addEventListener('click', function() {
    n1 = parseInt(document.getElementById("num").value);
    document.getElementById("num").value = " ";
    choice = 3
})
btndiv.addEventListener('click', function() {
    n1 = parseInt(document.getElementById("num").value);
    document.getElementById("num").value = " ";
    choice = 4
})
btnneg.addEventListener('click', function() {
    n1 = 0 - parseInt(document.getElementById("num").value);
    document.getElementById("num").value = n1;
})
btnpercent.addEventListener('click', function() {
    n1 = parseInt(document.getElementById("num").value);
    document.getElementById("num").value = n1/100;
})
btndeci.addEventListener('click', function() {
    document.getElementById("num").value =
document.getElementById("num").value+ ".";
    f1 = parseFloat(document.getElementById("num").value);
    choice = 5
})

btnequal.addEventListener('click', function() {
    n2 = parseInt(document.getElementById("num").value);
    document.getElementById("num").value = " ";
    if (choice == 1) {
        result = n1 + n2;
    }
    else if (choice == 2) {
        result = n1 - n2;
    }
    else if (choice == 3) {
        result = n1 * n2;
    }
    else if (choice == 5) {
        alert(f1,f2)
        if (choice == 1){
            result = f1 + f2;
            alert(choice,f1,f2)
        }
    }
})
```

```
        else if (choice == 2){
            result = f1 - f2;
            alert(choice,f1,f2)
        }
        else if (choice == 3){
            result = f1 * f2;
            alert(choice,f1,f2)
        }
        else {
            result = f1 / f2;
            alert(choice,f1,f2)
        }
    }
    else {
        result = n1 / n2;
    }
    document.getElementById("num").value = result;
})
btnclear.addEventListener('click', function() {
    document.getElementById("num").value = "";
})
</script>
</body>
</html>
```

**OUTPUT SCREENSHOT:**