Practical – 2

AIM:

1) **Write a JavaScript code to create Basic calculator using PromptBox**

Source Code:

HTML Code:

```
<div align="center">
  <h2>Calculator</h2>
  <p>Start Calculating.</p>
<button onclick="myFunction()">Go</button>
<p id="demo"></p></div>
```

JavaScript code:

```
function myFunction() {
  var x,y,z,oper;
  x=prompt("first number");
  y=prompt("second number");
  oper=prompt("Type an operator");
  if(oper=="+"){
    z=Number(x)+Number(y);
  }
  else if(oper==NULL){
    z="Error"
  }
  else if(x=!NULL){
    z="Error"
  }
  else if(y=!NULL){
```

```
  z="Error"
 }
 else if(oper=="/"){
  z=Number(x)/Number(y);
 }
 else if(oper=="*"){
  z=Number(x)*Number(y);
 }
 else if(oper=="-"){
  z=Number(x)-Number(y);
 }
 return z;
  }
document.getElementById("demo").innerHTML =myFunction();
```

OUTPUT:

```
Enter operator ( either +, -, * or / ): +
Enter first number: 5
Enter second number: 6
5 + 6 = 11
```

2) Write a JavaScript code to create Basic calculator using Input Box

Source Code:

HTML FILE:

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta http-equiv="X-UA-Compatible" content="IE=edge">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
    <title>Calculator</title>
    <link rel="stylesheet" href="Calculator.css">
</head>
<body>
    <div class="calculator">

        <input type="text" class="screen" id="screen" placeholder="0">

        <button class="symbol" onclick="wipe()">AC</button>
        <button class="symbol" onclick="wipe()">C</button>
        <button class="symbol" onclick="show('/')">/</button>
        <button class="symbol" onclick="show('%')">%</button>
        <button class="symbol" onclick="show('*')">*</button>

        <button class="number" onclick="show('7')">7</button>
        <button class="number" onclick="show('8')">8</button>
        <button class="number" onclick="show('9')">9</button>
        <button class="symbol" onclick="show('-')">-</button>

        <button class="number" onclick="show('4')">4</button>
        <button class="number" onclick="show('5')">5</button>
        <button class="number" onclick="show('6')">6</button>
        <button class="symbol" onclick="show('+')">+</button>

        <button class="number" onclick="show('1')">1</button>
        <button class="number" onclick="show('2')">2</button>
        <button class="number" onclick="show('3')">3</button>
        <button class="symbol" onclick="show('.')">.</button>
```

```
        <button class="number" onclick="show('(')">()</button>
        <button class="number" onclick="show('0')">0</button>
        <button class="symbol" onclick="calc('=')">=</button>

    </div>
    <script src="index.js"></script>
</body>
</html>
```

CSS FILE:-

```
* {
    box-sizing: border-box;
    margin: 0;
    padding: 0;
}

*::before,
*::after {
    box-sizing: inherit;
}
html,
body {
    font-size: 16px;
    font-family: sans-serif;
    height: 100%;
}
body {
```

```
    background: #04060b;
    display: flex;
    align-items: center;
    justify-content: center;
    -webkit-font-smoothing: antialiased;
    -webkit-tap-highlight-color: transparent;
}
input {
    border: none;
    outline: none;
}
input:focus {
    outline: none;
}
button {
    border: none;
    outline: none;
    background: none;
    cursor: pointer;
}
button:focus {
    outline: none;
}
.calculator {
    background: #a9aaae;
    display: grid;
    grid-template-columns: repeat(4, 1fr);
    gap: .75rem;
```

```
    width: 325px;
    border: 1px solid #333;
    padding: .75rem;
    border-radius: 1rem;
    position: fixed;
    top: 50%;
    left: 50%;
    transform: translate(-50%, -50%);
}

.screen {
    grid-column: 1 / 5;
    border-radius: .75rem;
    font-size: 2rem;
    height: 6rem;
    background: #444d72;
    text-align: end;
    padding: .5rem;
}
::placeholder {
    color: #fff;
}
.symbol,
.number {
    display: flex;
    align-items: center;
    justify-content: center;
    text-align: center;
```

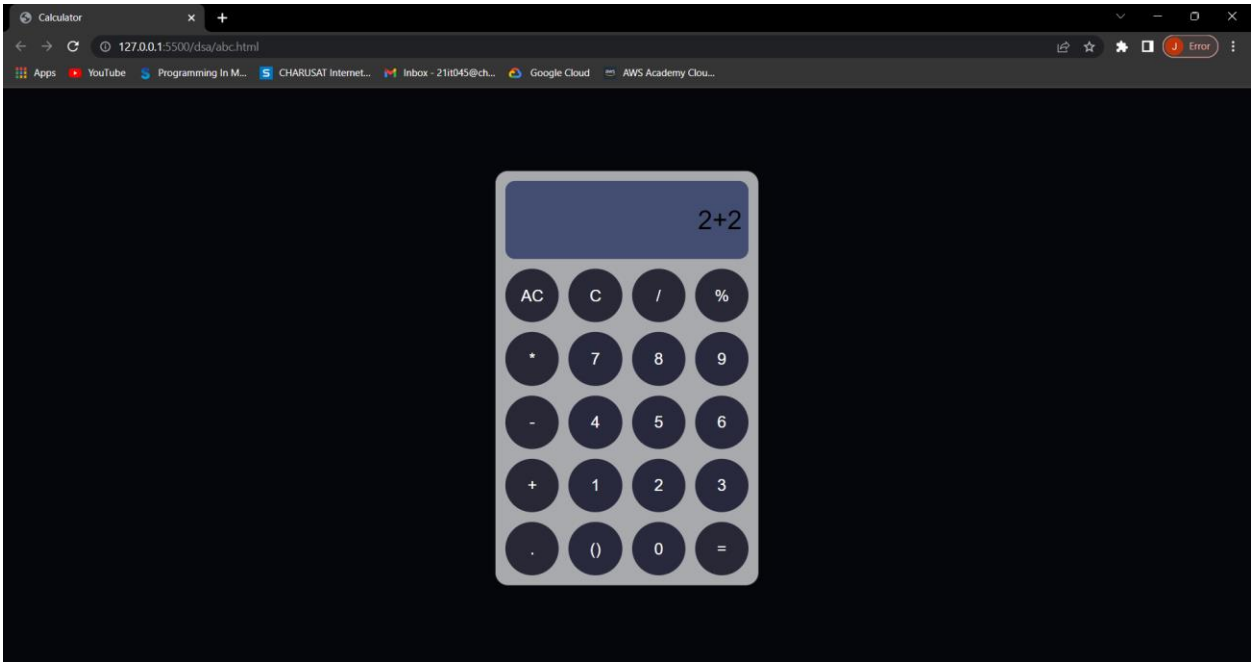
```
    aspect-ratio: 1;
    font-size: 1.25rem;
    color: #fff;
    border-radius: 50%;
    transition: .15s ease;
}

.symbol {
    background: #282836;
}
.symbol:hover {
    background: #131369;
}
.number {
    background: #29293d;
}
.number:hover {
    background: #183287ac;
}
```

JavaScript File:

```
let display = document.getElementById('screen');

const wipe = () => {
    display.value = '';
}

const show = (n) => {
```

```
    display.value += n;
}

const calc = () => {
    display.value = eval(display.value);
}
```

Output:



3) Do temperature Conversion using the input box and display the result on the Web Page. (Celsius to Fahrenheit)

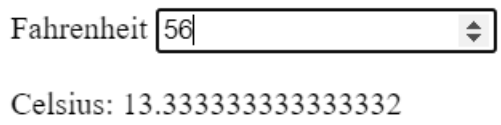
HTML file:

```
<p>
  <label>Fahrenheit</label>
  <input id="inputFahrenheit" type="number" placeholder="Fahrenheit"
  oninput="temperatureConverter(this.value)"
  onchange="temperatureConverter(this.value)">
</p>
<p>Celsius: <span id="outputCelsius"></span></p>
```

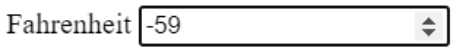
JavaScript Code:

```
function temperatureConverter(valNum) {
  valNum = parseFloat(valNum);
  document.getElementById("outputCelsius").innerHTML = (valNum-32) / 1.8;
}
```

Output:



Celsius: 13.333333333333332



Celsius: -50.55555555555556

Conclusion:

Javascript is one laungauge which is use for every application. JavaScript is generally use for backend and as well as fronted. Through javascript we can make same program like other programming laungauge.

Course Outcome:

JavaScript is one of the best scripting langauge so we can make all type of application.