Implement an application in Java Script using following:

a) Design UI of application using HTML, CSS etc.

b) Include Java script validation

c) Use of prompt and alert window using Java Script

e.g., Design and implement a simple calculator using Java Script for operations like addition,

multiplication, subtraction, division, square of number etc.

a) Design calculator interface like text field for input and output, buttons for numbers and

operators etc.

b) Validate input values

c) Prompt/alerts for invalid values etc

CODE:

Directory structure:

Home.html

```html
<!DOCTYP
E 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
        href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.cs
        s" rel="stylesheet" integrity="sha384-
        1BmE4kWBq78iYhFldvKuhfTAU6auU8tT94WrHftjDbrCEXSU1oBoqyl2QvZ6jIW3"
        crossorigin="anonymous">
            <link rel="stylesheet" href="style.css" type="text/css">


            <script
        src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.m
        in.js" integrity="sha384-
```

```
ka7Sk0Gln4gmtz2MlQnikT1wXgYsOg+OMhuP+IlRH9sENBO0LRn5q+8nbTov4+1p"
crossorigin="anonymous"></script>

</head>
<body>
    <h1 style="text-align: center;">CALCULATOR</h1>
<hr>
    <div class="container">


    <div class="outer1 text-center">

        <table class="tb">
            <tr>

                <td colspan="3"> <input type="text" id="result"></td>

                <td>
                    <input class="button"    type="button" value="C"
onclick="clearScreen()" readonly>
                </td>

            </tr>

            <tr>
                <td > <input type="button" value="1" onclick="d('1')" />
</td>
                <td > <input type="button" value="2" onclick="d('2')" />
</td>
                <td > <input type="button" value="3" onclick="d('3')" />
</td>
                <td > <input type="button" value="+" onclick="d('+')" />
</td>

            </tr>

            <tr>
                <td > <input type="button" value="4" onclick="d('4')" />
</td>
                <td > <input type="button" value="5" onclick="d('5')" />
</td>
                <td > <input type="button" value="6" onclick="d('6')" />
</td>
                <td > <input type="button" value="-" onclick="d('-')" />
</td>
```

```html
            </tr>

            <tr>
                <td > <input type="button" value="7" onclick="d('7')" />
</td>
                <td > <input type="button" value="8" onclick="d('8')" />
</td>
                <td > <input type="button" value="9" onclick="d('9')" />
</td>
                <td > <input type="button" value="/" onclick="d('/')" />
</td>

            </tr>

            <tr>
                <td > <input type="button" value="=" onclick="solve()" />
</td>
                <td > <input type="button" value="0" onclick="d('0')" />
</td>
                <td > <input type="button" value="." onclick="d('.')" />
</td>
                <td > <input type="button" value="*" onclick="d('*')" />
</td>

            </tr>


        </table>

    </div>
</div>

<body>
    <h3 style="text-align: center;">technology used  : HTML/CSS/JS</h3>
<hr>
<script type="text/javascript" src="script.js"> </script>
</body>
</html>
```

style.css

```css
body,html{

        margin: 25px;
}

input[type="button"]{


    border: none;
    width: 100%;
    outline: none;

    padding: 20px;
    border-radius: 15px;
    background-color: #b7ceec;

}
input[type="text"]{

    padding-left: 10px;
    background-color: #f7aaf6;
    box-shadow: 6px 5px 6px 2px gray;
}

.outer1{
    display: flex;
    justify-content: center;
}

.container{

    padding: 5px;
    margin: 5px;
    /* border: 2px solid black; */

}
```
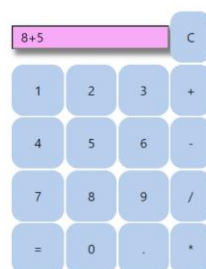
Script.js

```javascript
function d(val){

        document.getElementById("result").value+=val;
}

function clearScreen(){

    document.getElementById("result").value="";
}

function solve(){

    var x=document.getElementById("result").value;
    let y=eval(x);
    if(isNaN(result)){
        document.getElementById("result").value=y;
    }
    else{
        alert(" please enter correct data !!!")
    }
}
```
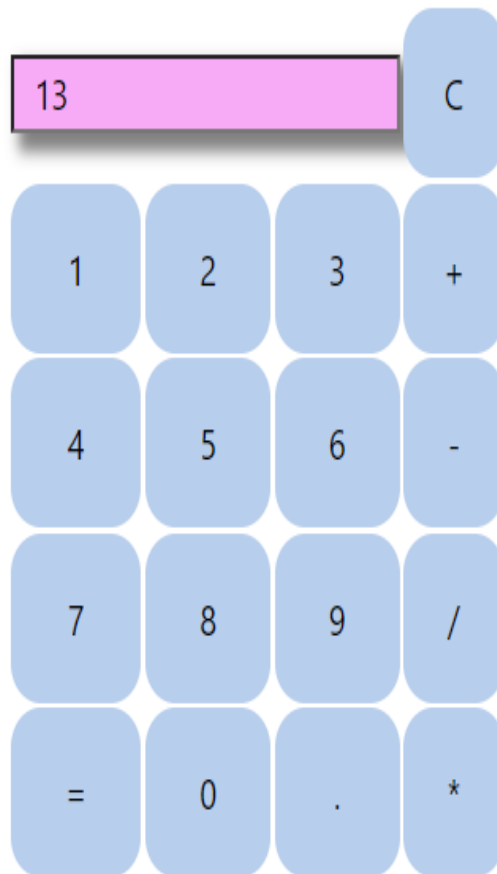
OUTPUT:

CALCULATOR

13			C
1	2	3	+
4	5	6	-
7	8	9	/
=	0	.	*

technology used : HTML/CSS/JS