

Marwadi Chandarana Group

FACULTY OF ENGINEERING AND TECHNOLOGY

Department of Computer Engineering 01CE0510 – Advanced Web Technology – Lab Manual

Practical 2:- Develop a Scientific Calculator using JavaScript.

Index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Practical 2</title>
</head>
<body>
   <h2>Scientific Calculator</h2>
   <input type="text" id="input" placeholder="0">
         <button onclick="backspace()" >CE</button>
         <button onclick="fact()" >x!</button>
         <button class="btn" >(</button>
         <button class="btn" >)</button>
         <button onclick="input.value=''" >Clear</putton>
         <button class="btn" >%</button>
         <button onclick="sin()" >sin</button>
         <button onclick="pi()" >&#8508;</button>
         <button class="btn" >7</button>
         <button class="btn" >8</button>
```





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```
<button class="btn" >9</button>
   <button class="btn" >/</button>
   <button onclick="cos()" >cos</button>
   <button onclick="log()" >log</button>
   <button class="btn" >4</button>
   <button class="btn" >5</button>
   <button class="btn" >6</button>
   < t.d >
      <button class="btn" >*</button>
   <button onclick="tan()" >tan</button>
   <button onclick="sqrt()" >&#8730;</putton>
   <button class="btn" >1</button>
   <button class="btn" >2</button>
   <button class="btn" >3</button>
   <button class="btn" >-</button>
   <button onclick="e()" >e</button>
   >
```





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```
<button onclick="pow()" >x<sup>2</sup></button>
           <button class="btn" >0</button>
           <button class="btn" >.</button>
           <button onclick="input.value=eval(input.value);">=</button>
           <button class="btn" >+</button>
           <button onclick="radian()" >Rad</putton>
           <button onclick="degree()" >Deg</button>
           <input type="text" disabled placeholder="Asif Alam B.tech CE</pre>
26" style="text-align: center;">
           </body>
</html>
calc.js
let input = document.getElementById('input');
   let btn = document.getElementsByClassName('btn');
   for(item of btn) {
       item.addEventListener('click', function(e) {
           btnText = e.target.innerHTML;
           input.value += btnText;
       });
   }
   function sin(){
       input.value = Math.sin(input.value);
   function cos(){
       input.value = Math.cos(input.value);
   function tan(){
       input.value = Math.tan(input.value);
   function pow() {
       input.value = Math.pow(input.value,2);
   function log() {
```



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```
input.value = Math.log(input.value);
function sqrt() {
    input.value = Math.sqrt(input.value);
function pi() {
    input.value = 3.14159265359;
}
function e(){
    input.value = 2.7182812846;
function fact(){
    var f=1;
    for (i=1; i<=input.value; i++) {</pre>
        f *= i;
    input.value = f;
function backspace(){
    input.value = input.value.substr(0,input.value.length-1);
function radian(){
    let rad = input.value;
    input.value = (rad*180)/3.14;
function degree(){
    let deg = input.value;
    input.value = (\text{deg}*180)/3.14;
}
```



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Output:- Scientific Calculator

256-2					
CE	x!)	Clear	%
sin	$\left[\pi\right]$	7	8	9	
cos	log	4	5	6	*
tan	$\sqrt{}$	1	2	3	_
е	$\begin{bmatrix} x^2 \end{bmatrix}$	0	•	=	+
Rad	Deg	Asif Alam B.tech CE 26			