

## Minor Project-Calculator

### HTML Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Calculator</title>
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap.min.css"
rel="stylesheet">
  <link rel="stylesheet" href="./style.css">

</head>
<body>
  <h2>Calculator</h2>
  <div class="calculator text-center">
    <input type="text" class="form-control display" id="display" disabled>
    <div class="mt-2 row">
      <button class="btn btn-danger" onclick="clearDisplay()">AC</button>
      <button class="btn btn-secondary" onclick="appendValue('%')">%</button>
      <button class="btn btn-secondary" onclick="squareNumber()">x2</button>
      <button class="btn btn-warning" onclick="appendValue('/')">/</button>
    </div>
    <div class="mt-2 row">
      <button class="btn btn-light" onclick="appendValue('7')">7</button>
      <button class="btn btn-light" onclick="appendValue('8')">8</button>
      <button class="btn btn-light" onclick="appendValue('9')">9</button>
      <button class="btn btn-warning" onclick="appendValue('*')">*</button>
    </div>
    <div class="mt-2 row">
      <button class="btn btn-light" onclick="appendValue('4')">4</button>
      <button class="btn btn-light" onclick="appendValue('5')">5</button>
      <button class="btn btn-light" onclick="appendValue('6')">6</button>
      <button class="btn btn-warning" onclick="appendValue('-')">-</button>
    </div>
    <div class="mt-2 row">
      <button class="btn btn-light" onclick="appendValue('1')">1</button>
      <button class="btn btn-light" onclick="appendValue('2')">2</button>
```

```

        <button class="btn btn-light" onclick="appendValue('3')">3</button>
        <button class="btn btn-warning" onclick="appendValue('+')">+</button>
    </div>
    <div class="mt-2 row">
        <button class="btn btn-info" onclick="toggleTrigButtons()">Trig</button>
        <button class="btn btn-light" onclick="appendValue('0')">0</button>
        <button class="btn btn-light" onclick="appendValue('.')">.</button>
        <button class="btn btn-success" onclick="calculate()">=</button>
    </div>
    <div class="mt-2 row trig-buttons" id="trig-buttons">
        <div>
            <button class="btn btn-info" onclick="calculateTrig('sin')">sin</button>
            <button class="btn btn-info" onclick="calculateTrig('cos')">cos</button>
            <button class="btn btn-info" onclick="calculateTrig('tan')">tan</button>
        </div>
        <div>
            <button class="btn btn-info" onclick="calculateTrig('asin')">sin-1</button>
            <button class="btn btn-info" onclick="calculateTrig('acos')">cos-1</button>
            <button class="btn btn-info" onclick="calculateTrig('atan')">tan-1</button>
        </div>
    </div>
    <script src="./script.js"></script>
</body>
</html>

```

## **CSS Code:**

```

body {
    display: flex;
    justify-content: center;
    align-items: center;
    height: 100vh;
    background-color: rgb(166, 215, 236);
}
.calculator {
    width: 400px;
    background: white;
    padding: 20px;
    border-radius: 10px;
}

```

```

    box-shadow: 0 4px 10px rgba(0, 0, 0, 0.1);
}
.btn {
    width: 65px;
    height: 65px;
    font-size: 20px;
}
.display {
    height: 60px;
    text-align: right;
    font-size: 24px;
    margin-bottom: 10px;
    padding-right: 10px;
}
.row {
    display: flex;
    justify-content: center;
}
.trig-buttons {
    display: none;
}
h2{
    position: absolute;
    top: 35px;
    left: 35px;
}

```

### **Java Script code:**

```

let display = document.getElementById("display");
let trigButtons = document.getElementById("trig-buttons");

function appendValue(value) {
    display.value += value;
}

function clearDisplay() {
    display.value = "";
}

```

```
function calculate() {
  try {
    display.value = eval(display.value);
  } catch {
    display.value = "Error";
  }
}
```

```
function squareNumber() {
  try {
    display.value = Math.pow(eval(display.value), 2);
  } catch {
    display.value = "Error";
  }
}
```

```
function calculateTrig(func) {
  try {
    let value = eval(display.value);
    if (func === 'sin') display.value = Math.sin(value * Math.PI / 180);
    if (func === 'cos') display.value = Math.cos(value * Math.PI / 180);
    if (func === 'tan') display.value = Math.tan(value * Math.PI / 180);
    if (func === 'asin') display.value = Math.asin(value) * 180 / Math.PI;
    if (func === 'acos') display.value = Math.acos(value) * 180 / Math.PI;
    if (func === 'atan') display.value = Math.atan(value) * 180 / Math.PI;
  } catch {
    display.value = "Error";
  }
}
```

```
function toggleTrigButtons() {
  if (trigButtons.style.display === "none" || trigButtons.style.display === "") {
    trigButtons.style.display = "flex";
  } else {
    trigButtons.style.display = "none";
  }
}
```