CALCULATOR CODE

```html
<!doctype html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport"
      content="width=device-width, user-scalable=no, initial-scale=1.0, maximum-scale=1.0,
minimum-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
  <title>Basic Calculator</title>
<center>
  <style>
    #app {
      width: 300px;
    }

    .display {
      width: 100%;
      padding: 10px;
      color: #fff;
      background: #333;
      display: flex;
      align-items: center;
      justify-content: flex-end;
      height: 40px;
      font-size: 22px;
    }

    .row {
      display: flex;
```

```css
        width: 100%;
    }


    .btn {
        color: #fff;
        width: 25%;
        height: 60px;
        font-size: 20px;
        display: flex;
        align-items: center;
        justify-content: center;
        border: 0.05rem solid #000;
        cursor: pointer;
    }


    .btn:hover {
        opacity: 0.8;
    }


    .btn-0 {
        width: 50%;
    }


    .bg-gray-1 {
        background-color: #4a5568;
    }


    .bg-gray-2 {
        background-color: #a0aec0;
    }
```

```html
      .bg-orange {

        background-color: #ed8936;

      }
</center>
  </style>
</head>
<body>
  <div id="app">
    <div class="display" id="display">

      0

    </div>
    <div class="row">

     <div class="btn bg-gray-1" id="clear">

       AC

      </div>

      <div class="btn bg-gray-1" id="negate">

       +/-

      </div>

      <div class="btn bg-gray-1" id="percent">

       %

      </div>

      <div class="btn bg-orange" id="divide">

       ÷

      </div>

    </div>

    <div class="row">

     <div class="btn bg-gray-2" id="7">

       7

      </div>

      <div class="btn bg-gray-2" id="8">

       8
```

```html
    </div>
    <div class="btn bg-gray-2" id="9">
      9
    </div>
    <div class="btn bg-orange" id="multiply">
      ×
    </div>
  </div>
  <div class="row">
    <div class="btn bg-gray-2" id="4">
      4
    </div>
    <div class="btn bg-gray-2" id="5">
      5
    </div>
    <div class="btn bg-gray-2" id="6">
      6
    </div>
    <div class="btn bg-orange" id="subtract">
      -
    </div>
  </div>
  <div class="row">
    <div class="btn bg-gray-2" id="1">
      1
    </div>
    <div class="btn bg-gray-2" id="2">
      2
    </div>
    <div class="btn bg-gray-2" id="3">
      3
```

```html
        </div>
        <div class="btn bg-orange" id="add">
          +
        </div>
      </div>
      <div class="row">
        <div class="btn bg-gray-2 btn-0" id="0">
          0
        </div>
        <div class="btn bg-gray-2" id="decimal">
          .
        </div>
        <div class="btn bg-orange" id="equals">
          =
        </div>
      </div>
    </div>

    <script type="text/javascript">
      let result = 0;
      let current = 0;
      let display = '0';
      let isDecimal = false;
      let lastOperator = null;
      let isFinish = false;

      function updateDisplay() {
        document.getElementById('display').innerHTML = display;
      }

      function convertToNumber(val) {
```

```javascript
    return String(val).includes('.') ? parseFloat(val) : Number(val);
}


function calculate(first, second) {
  first = convertToNumber(first);
  second = convertToNumber(second);

  switch (lastOperator) {
    case '+':
      first += second;
      break;
    case '-':
      first -= second;
      break;
    case '÷':
      first /= second;
      break;
    case '×':
      first *= second;
      break;
    default:
      first = second;
      break;
  }

  return first;
}


function runOperator(operator) {
  if (lastOperator) {
    result = calculate(result, current);
```

```javascript
      display = String(result);
      updateDisplay();
    } else {
      result = convertToNumber(display);
    }
    isFinish = false;
    current = 0;
    lastOperator = operator;
    isDecimal = false;
  }


  document.querySelectorAll('.btn').forEach(button => {
    button.addEventListener('click', function () {
      const id = this.id;


      if (id >= '0' && id <= '9') {
        if ((lastOperator && current === 0) || isFinish) {
          current = 0;
          display = '0';
        }
        isFinish = false;
        display = isDecimal || display !== '0' ? display + id : id;
        current = convertToNumber(display);
        updateDisplay();
      } else if (id === 'clear') {
        result = 0;
        display = '0';
        isDecimal = false;
        lastOperator = null;
        current = 0;
        isFinish = false;
```

```javascript
    updateDisplay();
  } else if (id === 'negate') {
    const tmp = convertToNumber(display) * -1;
    display = String(tmp);
    current = tmp;
    isDecimal = false;
    updateDisplay();
  } else if (id === 'percent') {
    const tmp = convertToNumber(current) / 100;
    display = String(tmp);
    current = tmp;
    isDecimal = false;
    updateDisplay();
  } else if (id === 'add') {
    runOperator('+');
  } else if (id === 'subtract') {
    runOperator('-');
  } else if (id === 'multiply') {
    runOperator('×');
  } else if (id === 'divide') {
    runOperator('÷');
  } else if (id === 'equals') {
    const tmp = calculate(result, current);
    isDecimal = false;
    result = tmp;
    display = String(result);
    isFinish = true;
    updateDisplay();
  } else if (id === 'decimal') {
    isFinish = false;
    if ((!lastOperator && display === '0') || isDecimal) {
```

```
            display = '0';

            isDecimal = false;

            current = 0;

          }


        if (!isDecimal) {

          const tmp = convertToNumber(display);

          if (!isNaN(tmp)) {

            isDecimal = true;

            display = (lastOperator && display === '0' ? '0' : String(display)) + '.';

            current = convertToNumber(display);

            updateDisplay();

          }

        }

      }

    });

   });

  </script>

</body>

</html>
```