

1. Calculator

Index.html

```
<!DOCTYPE html>
<html lang="en">

  <head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet" href="style.css">
    <title>Calculator</title>
  </head>

  <body>

    <body>
    <div class="calculator animate_animated animate_jackInTheBox">
      <input type="text" class="calculator-screen" value="0" disabled />
      <div class="calculator-keys">
        <div class="row">
          <button class="all-clear">AC</button>
          <button class="percentage">%</button>
          <button class="operator" value="/">&divide;</button>
        </div>
        <div class="row">
          <button class="number" value="7">7</button>
          <button class="number" value="8">8</button>
          <button class="number" value="9">9</button>
          <button class="operator" value="*">&times;</button>
        </div>

        <div class="row">
          <button class="number" value="4">4</button>
          <button class="number" value="5">5</button>
          <button class="number" value="6">6</button>
          <button class="operator" value="-">-</button>
        </div>

        <div class="row">
          <button class="number" value="1">1</button>
          <button class="number" value="2">2</button>
          <button class="number" value="3">3</button>
          <button class="operator" value="+">+</button>
        </div>

        <div class="row">
          <button class="number zero-btn" value="0">0</button>
          <button class="decimal" value=".">.</button>
        </div>
      </div>
    </div>
  </body>
</body>
</html>
```

```

        <button class="equal-sign">=</button>
      </div>
    </div>
  </div>

  <script type="text/javascript" src="script.js"></script>
</body>
</body>

</html>

```

Style.css

```

*,
*::after,
*::before {
  box-sizing: border-box;
  margin: 0;
  padding: 0;
  font-family: "Spartan", sans-serif;
  font-size: 32px;
}

:root {
  --bg-theme: hsl(222, 26%, 31%);
  --bg-toggle-keypad: hsl(223, 31%, 20%);
  --bg-screen: hsl(224, 36%, 15%);
  --bg-del-reset-key: hsl(225, 21%, 49%);
  --bg-keys: hsl(30, 25%, 89%);
  --bg-result-toggle-key: hsl(6, 63%, 50%);
  --hover-equal-sign: hsl(6, 70%, 34%);
  --text-color: hsl(221, 14%, 31%);
}

body {
  height: 100vh;
  background-color: var(--bg-theme);
  display: flex;
  justify-content: center;
  align-items: center;
  flex-direction: column;
}

.calculator {
  text-align: center;
  width: 400px;
}

.calculator-screen {

```

```

        width: 100%;
        height: 100px;
        background-color: var(--bg-screen);
        color: #fff;
        text-align: right;
        font-size: 36px;
        border: none;
        padding: 0 20px;
        border-radius: 10px;
        margin-bottom: 15px;
    }

    .calculator-keys {
        width: 100%;
        background-color: var(--bg-toggle-keypad);
        padding: 15px 10px;
        border-radius: 10px;
    }

    .row {
        display: flex;
    }

    button {
        height: 50px;
        border: 1px solid black;
        font-size: 32px;
        width: 25%;
        outline: none;
        border-radius: 5px;
        background-color: var(--bg-keys);
        color: var(--text-color);
    }

    .all-clear,
    .zero-btn {
        width: 50%;
    }

    .operator {
        background-color: var(--bg-del-reset-key);
        color: #fff;
    }

    .equal-sign {
        background-color: var(--bg-result-toggle-key);
        color: #fff;
    }

```

```
button:hover {  
  background-color: darkgray;  
}
```

```
.operator:hover {  
  background-color: var(--bg-toggle-keypad);  
}
```

```
.equal-sign:hover {  
  background-color: var(--hover-equal-sign);  
}
```

App.js

```
let prevNumber = "";  
let calculationOperator = "";  
let currentNumber = "0";
```

```
const calculatorScreen = document.querySelector(".calculator-screen");  
function updateScreen(number) {  
  
  calculatorScreen.value = number;  
}
```

```
const numbers = document.querySelectorAll(".number");  
numbers.forEach(function (number) {
```

```
  number.addEventListener("click", function (event) {
```

```
    inputNumber(event.target.value);  
    updateScreen(currentNumber);  
  });  
});
```

```
function inputNumber(number) {  
  if (currentNumber === "0") {  
  
    currentNumber = number;  
  } else {  
    currentNumber += number;  
  }  
}
```

```

const operators = document.querySelectorAll(".operator");
operators.forEach(function (operator) {
  operator.addEventListener("click", function (event) {
    inputOperator(event.target.value);
  });
});

```

```

function inputOperator(operator) {
  if (calculationOperator === "") {
    prevNumber = currentNumber;
  }
  calculationOperator = operator;
  currentNumber = "0";
}

```

```

const equalSign = document.querySelector(".equal-sign");
equalSign.addEventListener("click", function () {
  calculate();
  updateScreen(currentNumber);
});

```

```

function calculate() {
  let result = "";
  switch (calculationOperator) {
    case "+":
result = parseFloat(prevNumber) + parseFloat(currentNumber);
      break;
    case "-":
result = parseFloat(prevNumber) - parseFloat(currentNumber);
      break;
    case "*":
result = parseFloat(prevNumber) * parseFloat(currentNumber);
      break;
    case "/":
result = parseFloat(prevNumber) / parseFloat(currentNumber);
      break;
    default:
      break;
  }
  currentNumber = result;
  calculationOperator = "";
}

```

```
function clearAll() {  
  prevNumber = "";  
  calculationOperator = "";  
  currentNumber = "0";  
}
```

```
const clearBtn = document.querySelector(".all-clear");  
clearBtn.addEventListener("click", function () {  
  clearAll();  
  updateScreen(currentNumber);  
});
```

```
const decimal = document.querySelector(".decimal");  
decimal.addEventListener("click", function (event) {
```

```
  inputDecimal(event.target.value);  
  updateScreen(currentNumber);  
});
```

```
inputDecimal = function (dot) {  
  if (currentNumber.includes(".")) {  
    return;  
  }  
  currentNumber += dot;  
};
```

```
const percentage = document.querySelector(".percentage");  
percentage.addEventListener("click", function (event) {  
  inputPercentage(event.target.value);  
  updateScreen(currentNumber);  
});
```

```
inputPercentage = function (percentage) {  
  if (currentNumber.includes("%")) {  
    return;  
  }  
  currentNumber = currentNumber / 100;  
};
```