const display = document.querySelector('.calculator-display');

const buttons = document.querySelector('.calculator-buttons');

let firstValue = null;

let operator = null;

let waitingForSecondValue = false;

buttons.addEventListener('click', (event) => {

const { target } = event;

const value = target.value;

if (!target.matches('button')) {

return;

}

switch (value) {

case '+':

case '-':

case '\*':

case '/':

case '=':

handleOperator(value);

break;

case '.':

inputDecimal(value);

break;

case 'C':

resetCalculator();

break;

default:

inputDigit(value);

}

});

function inputDigit(digit) {

if (waitingForSecondValue === true) {

display.value = digit;

waitingForSecondValue = false;

} else {

display.value = display.value === '' ? digit : display.value + digit;

}

}

function inputDecimal(dot) {

if (!display.value.includes(dot)) {

display.value += dot;

}

}

function handleOperator(nextOperator) {

const inputValue = parseFloat(display.value);

if (operator && waitingForSecondValue) {

operator = nextOperator;

return;

}

if (firstValue === null) {

firstValue = inputValue;

} else if (operator) {

const result = calculate(firstValue, inputValue, operator);

display.value = String(result);

firstValue = result;

}

waitingForSecondValue = true;

operator = nextOperator;

}

function calculate(first, second, operator) {

if (operator === '+') return first + second;

if (operator === '-') return first - second;

if (operator === '\*') return first \* second;

if (operator === '/') return first / second;

return second;

}

function resetCalculator() {

display.value = '';

firstValue = null;

operator = null;

waitingForSecondValue = false;

}