**🧮 Basic Calculator**

**📌 Project Overview**

This project is a **Basic Calculator** built using **HTML, CSS, and JavaScript**.  
It allows users to perform fundamental arithmetic operations such as **addition, subtraction, multiplication, and division**.  
The calculator provides a **user-friendly interface** with responsive input handling and proper error management.

**🚀 Features**

* ➕ Addition, ➖ Subtraction, ✖ Multiplication, ➗ Division
* 🖥️ User-friendly interface with real-time display
* ⌨ Supports both **button clicks** and **keyboard input**
* ❌ Error handling (e.g., division by zero)
* 🧮 Follows **BODMAS/BIDMAS** order of operations
* 🔄 Clear (C) button to reset input
* ✅ Equals (=) button to calculate result

**🔧 Optional Enhancements (if added)**

* Square root (√)
* Percentage (%) calculations
* Memory functions (M+, M-, MR, MC)

**🛠️ Technologies Used**

* **HTML** → Structure
* **CSS** → Styling & Layout
* **JavaScript** → Functionality

**📂 Project Structure**

basic-calculator/

│── index.html # Calculator layout (UI structure)

│── style.css # Styling and design

│── script.js # Functionality and logic

│── README.md # Documentation (this file)

**📖 How to Use**

1. Open index.html in any modern web browser.
2. Use the **buttons** or your **keyboard** to enter numbers and operators.
3. Press **=** to see the result.
4. Press **C** to clear the display.

**⚠️ Error Handling**

* Displays an error message if division by zero is attempted.
* Prevents invalid inputs (e.g., multiple decimal points in a number).

**✅ Assessment Criteria (Covered)**

* **Functionality** → Performs arithmetic operations correctly.
* **User Interface** → Simple, clean, and easy to use.
* **Code Quality** → Structured, commented, and readable.
* **Error Handling** → Handles invalid operations gracefully.
* **Extra Features** → Optional advanced features can be added.