

# Calculator Using Arduino UNO

## Description:

This Project is to design **Calculator** using **Arduino UNO** board, **4x4 Keypad** and a **LCD display**. This calculator do basic mathematical operations like **Addition (+)**, **Subtraction (-)**, **Multiplication (x)**, and **Division (/)**. When the user enters the operands in the LCD and **based on the operator** the **operation** need to be **performed** (i.e. when user enters operator “+” in the keypad then **addition operation** need to be performed and follows...). The calculator will take **only two operands** and **single operator** at a time. The calculator takes **recent two operators** and **recent operand** only.

## Block Diagram:



## Inputs and Outputs:

S.No	Description	Name	Type	Data Direction	Spec	Remarks
1	KeyPad Row1 Pin	A	INP	DI	5VDC	Active High
2	KeyPad Row2 Pin	B	INP	DI	5VDC	Active High
3	KeyPad Row3 Pin	C	INP	DI	5VDC	Active High
4	KeyPad Row4 Pin	D	INP	DI	5VDC	Active High
5	KeyPad Column 1 Pin	1	INP	DI	5VDC	Active High
6	KeyPad Column 2 Pin	2	INP	DI	5VDC	Active High
7	KeyPad Column 3 Pin	3	INP	DI	5VDC	Active High
8	KeyPad Column 4 Pin	4	INP	DI	5VDC	Active High
9	LCD Reset Pin	RS	OUT	DO	5VDC	Active High
10	LCD Enable Pin	E	OUT	DO	5VDC	Active High
11	LCD Data Pin 1	D4	OUT	DO	5VDC	Active High
12	LCD Data Pin 2	D5	OUT	DO	5VDC	Active High
13	LCD Data Pin 3	D6	OUT	DO	5VDC	Active High
14	LCD Data Pin 4	D7	OUT	DO	5VDC	Active High

## Flow Chart: