

Components Used

Component	Description
Arduino UNO	Microcontroller board used for programming and connecting all components.
4x4 Keypad	Input device with 16 buttons (4 rows × 4 columns) for numeric and symbol input.
Jumper Wires	Used to connect the keypad pins to the Arduino UNO digital pins.

Project Description

In this project, a **4x4 matrix keypad** is interfaced with an **Arduino UNO**. The keypad consists of 16 keys arranged in a matrix of rows and columns. Each key corresponds to a specific character such as numbers (0–9) and symbols (+, -, *, /, etc.).

The program reads the key pressed on the keypad using the Keypad library and displays the result on the **Serial Monitor**. Proper row and column pin connections are defined, and each keypress is detected using the `getKey()` function and printed via `Serial.println()`.

This project helps in understanding how to use external input devices like keypads for building interactive embedded systems like calculators, password entries, and menu navigators.