

Components Required

Hardware Requirements

- 8051 Microcontroller
- 8051 Development Board
- 8051 Programmer
- 4×4 Matrix Keypad
- 16×2 LCD
- L293D Motor Driver Board
- DC Motor
- 10KΩ Potentiometer
- Connecting wires
- Power Supply
- If 8051 Development Board is not used, then the following components are needed.
 - 11.0592 MHz Quartz Crystal
 - 2 x 33pF Ceramic Capacitors
 - 2 x 10 KΩ Resistor (1/4 Watt)
 - 10 μF Capacitor (Polarized)
 - Push Button
 - 2 x 1 KΩ Resistors (for pull up)

Software Requirements

- Keil μVision IDE
- Willar Programmer
- Proteus (for circuit diagram and simulation)