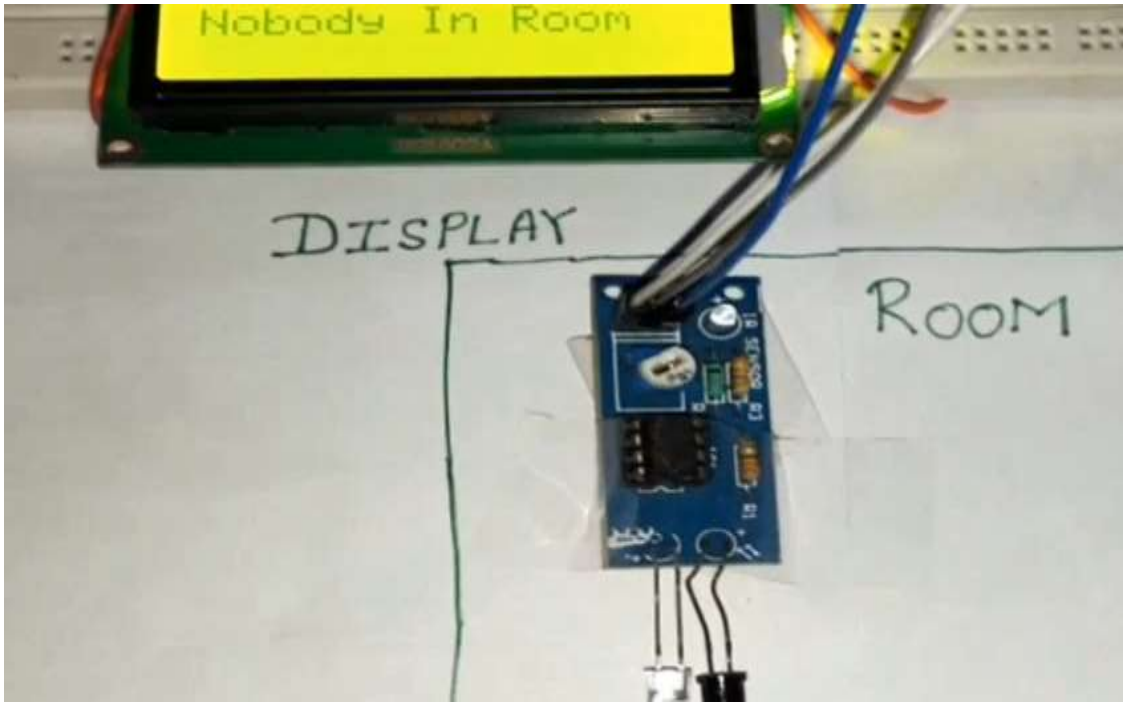
Bidirectional Visitor Counter

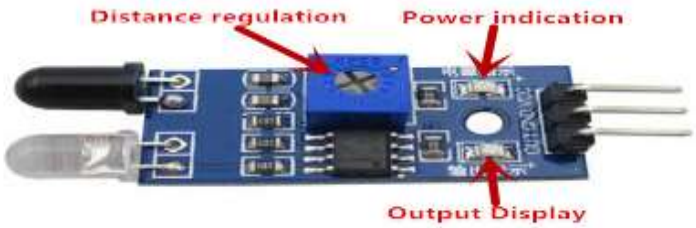


LCD (Liquid Crystal Display)

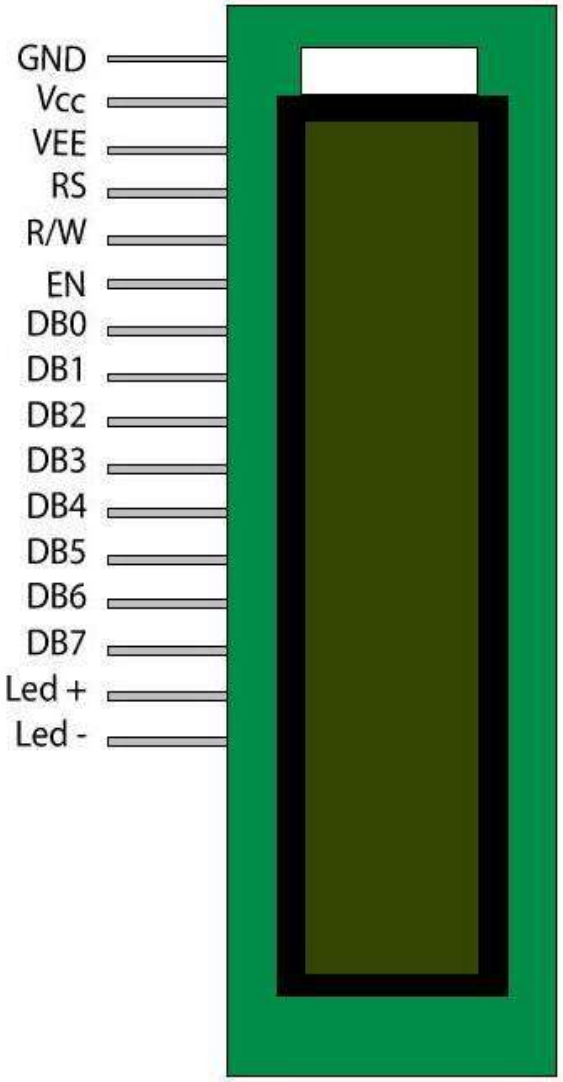
Liquid crystal displays (LCDs) are a commonly used to display data in devices such as calculators, microwave ovens, and many other electronic devices.

IR Sensor

An IR sensor is an electronic instrument that scans IR signals in specific frequency ranges defined by standards and converts them to electric signals on its output pin (typically called signal pin).



Terminal used	Connection
Terminal 1	GND
Terminal 2	+5V
Terminal 3	Mid terminal of potentiometer (for brightness control)
Terminal 4	Register Select (RS)
Terminal 5	Read/Write (RW)
Terminal 6	Enable (EN)
Terminal 7	DB0
Terminal 8	DB1
Terminal 9	DB2
Terminal 10	DB3
Terminal 11	DB4
Terminal 12	DB5
Terminal 13	DB6
Terminal 14	DB7
Terminal 15	+4.2-5V
Terminal 16	GND



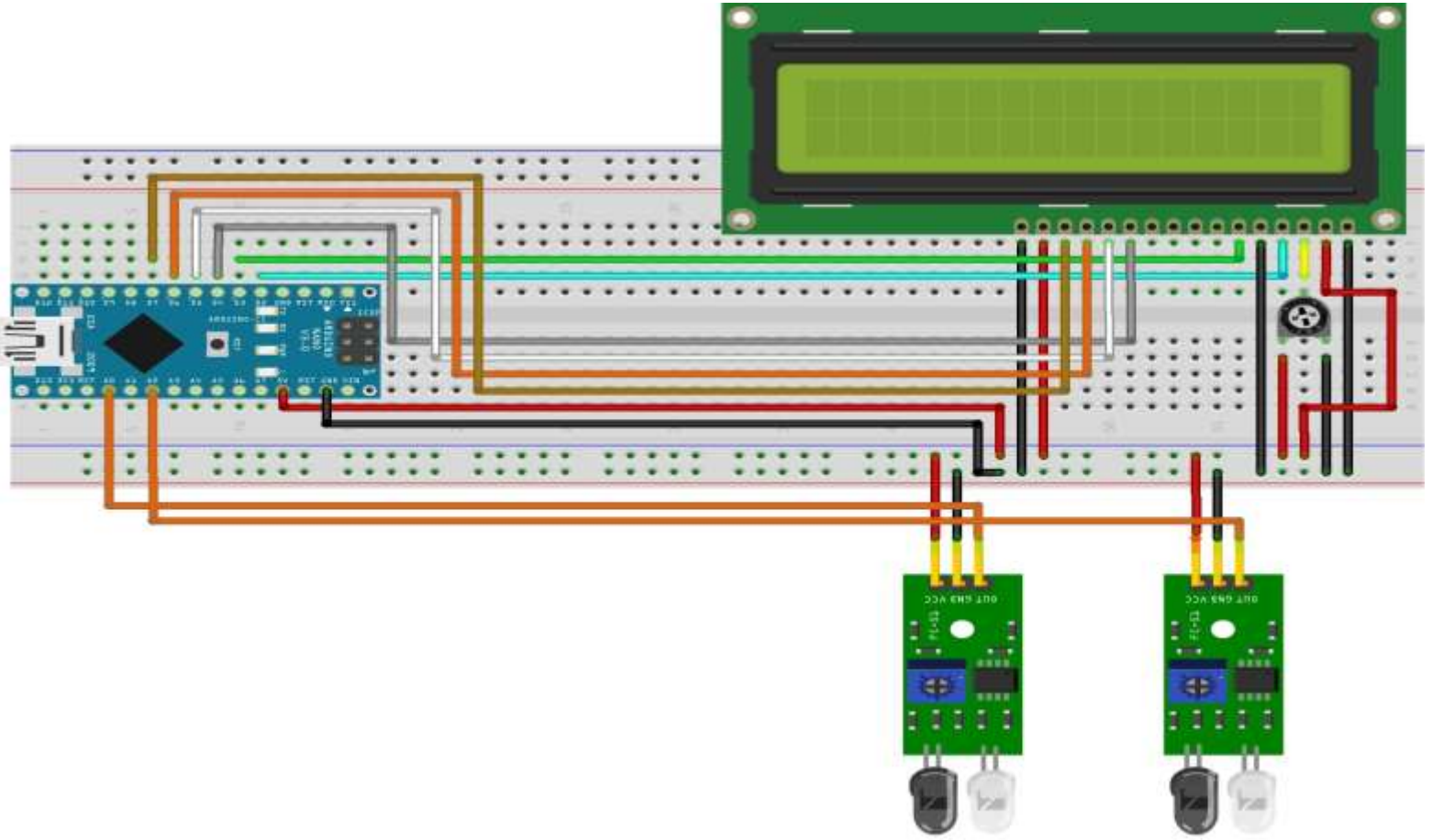
Working of project

- In this project, **Bidirectional Visitor Counter** we have used two IR sensors , LCD, Arduino Nano.
- Basic concept behind this project is to measure and display the number of persons entering in any room like seminar hall, conference room etc. LCD displays number of person inside the room.

Components Required

- Arduino Nano
- 16x2 LCD
- 2 IR Sensors
- Potentiometer 10k
- Jumper wires
- Breadboard

Connection Diagram



Connections for LCD :

- PIN1 or Vss to ground
- PIN2 or Vdd or Vcc to +5V power
- PIN3 or Vee to potentiometer (gives maximum contrast best for a beginner)
- PIN4 or RS (Register Selection) to D2 of Arduino
- PIN5 or RW (Read/Write) to ground
- PIN6 or E (Enable) to D3 of Arduino
- PIN11 or D4 to D4 of Arduino
- PIN12 or D5 to D5 of Arduino
- PIN13 or D6 to D6 of Arduino
- PIN14 or D7 to D7 of Arduino
- PIN15 or A to +5V of Arduino
- PIN16 or K to GND of Arduino

Connections for IR Sensors

1. Connect OUT pin of IR sensor 1 with A0 pin of Arduino Nano.
2. Connect Vcc pin of IR sensor 1 with 5V of Arduino Nano.
3. Connect GND pin of IR sensor 1 with GND of Arduino Nano.
4. Connect OUT pin of IR sensor 2 with A2 pin of Arduino Nano.
5. Connect Vcc pin of IR sensor 2 with 5V of Arduino Nano.
6. Connect GND pin of IR sensor 2 with GND of Arduino Nano.

Project Link: https://youtu.be/UXWlb03Ym_s