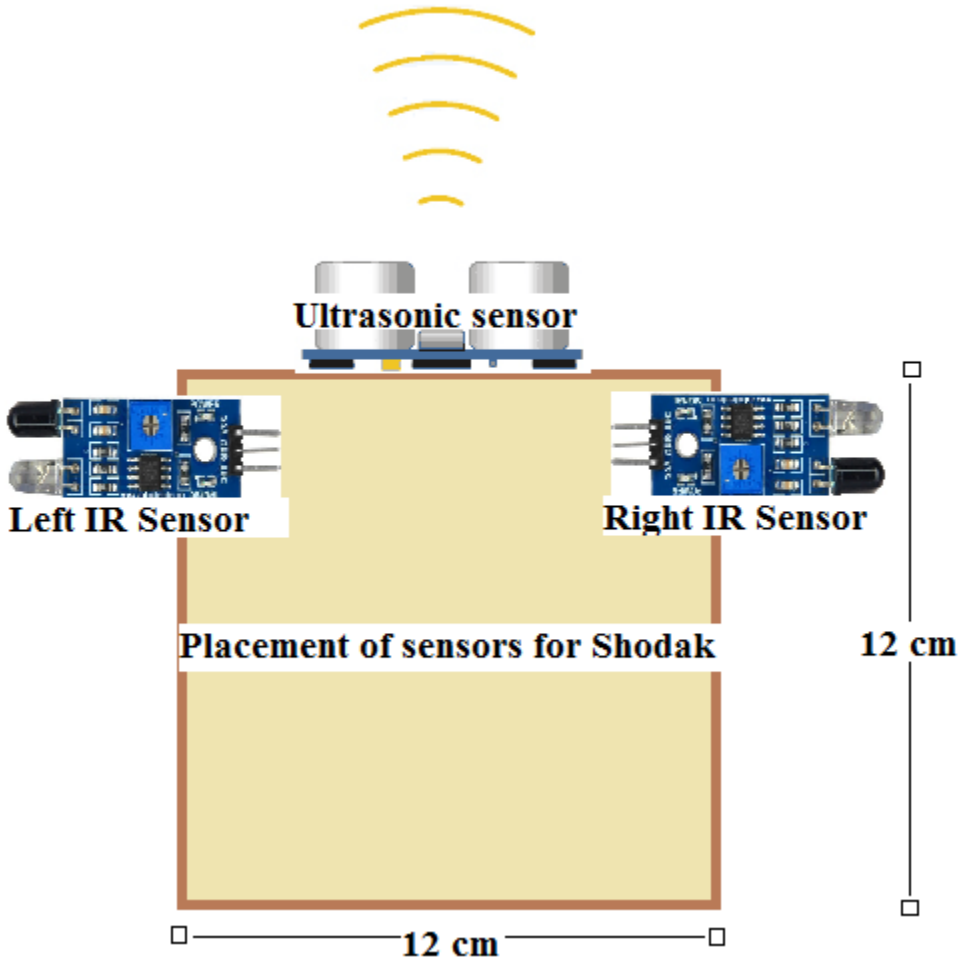
Placement of Sensors:

Top view:



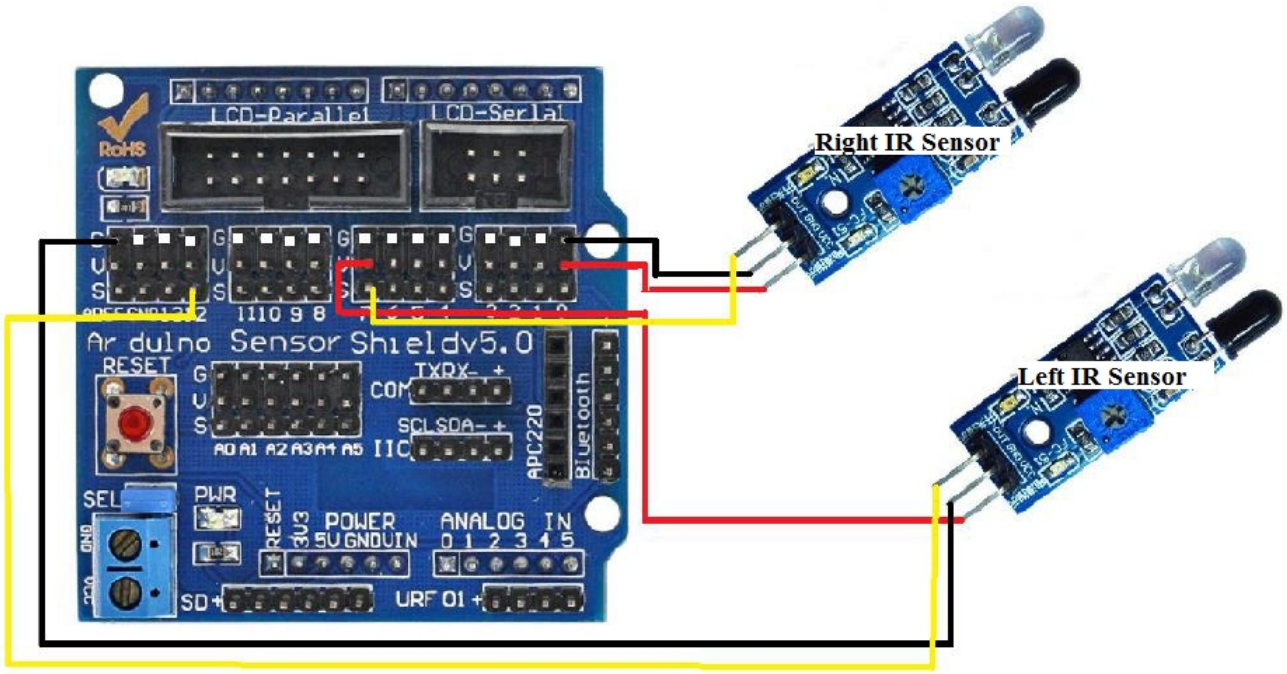
Connections:

IR Sensors:

An IR sensor has three terminal pins namely GND, VCC and OUT.
The GND is to be connected to the ground of the sensor shield-expansion board which is mounted on top of the arduino UNO R3 microcontroller board.

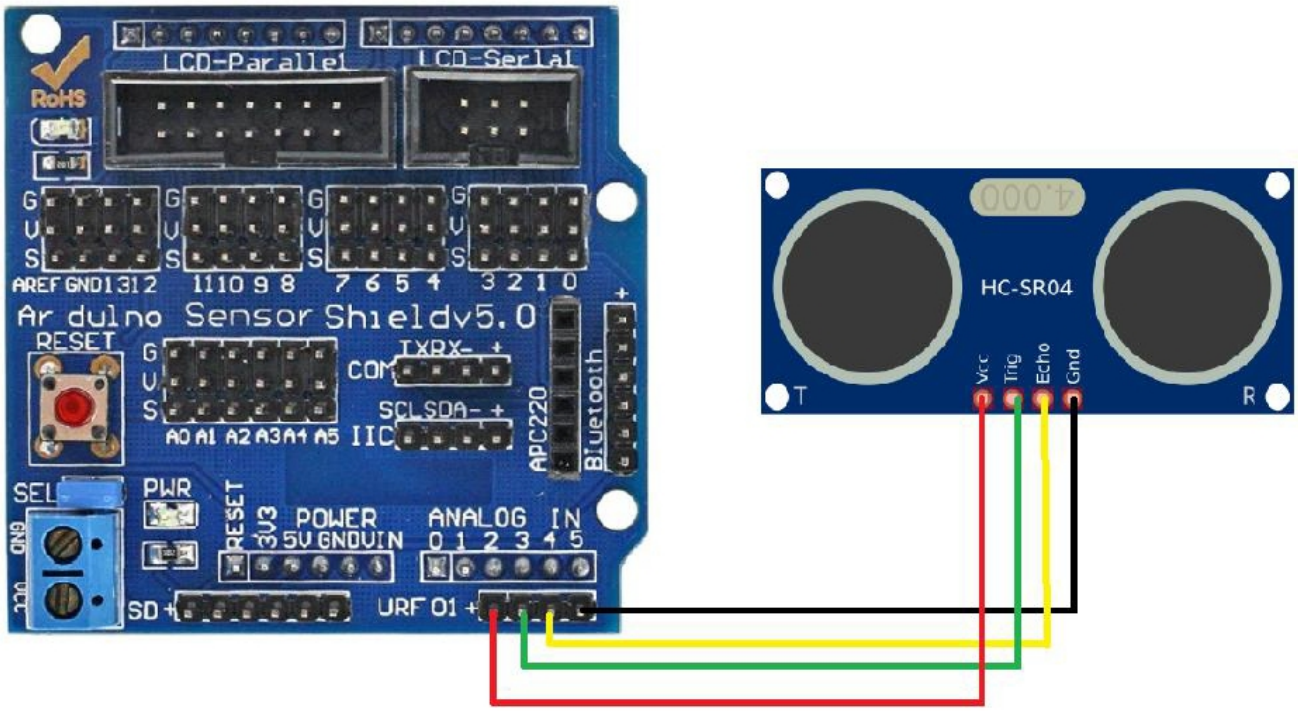
The VCC is to be connected to the 5V pin of the sensor shield-expansion board. The

OUT signal is to be given to the Arduino as an input signal. Therefore, OUT is connected to D12 in case of Left IR sensor and D7 in case of Right IR sensor.



Ultrasonic Sensor Connection:

The pins Vcc, Trig, Echo, and Gnd of ultrasonic sensor are connected to the pins VCC, A0, A1, and GND of ultrasonic interface on sensor shield



Motors and H-Bridge:

Connecting Motors and H bridge:
The wires corresponding to motor on the left side of shodak (Motor A) are connected to Out1 and Out2 of the H-Bridge.
The wires corresponding to motor on the right side of shodak (Motor B) are connected to Out3 and Out4 of the H-Bridge.

Connecting H-bridge to Sensor shield
The pins ENA and ENB of H-Bridge are connected to S of D8 and S of D9 of the sensor shield respectively.
The pins IN1 IN2 IN3 and IN4 of H-Bridge are connected to S of D2, S of D3, S of D4 and S of D5 of the sensor shield respectively.