

Experiment Number 2.2

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Subject ::	WSN Lab	CODE ::	CSD-331

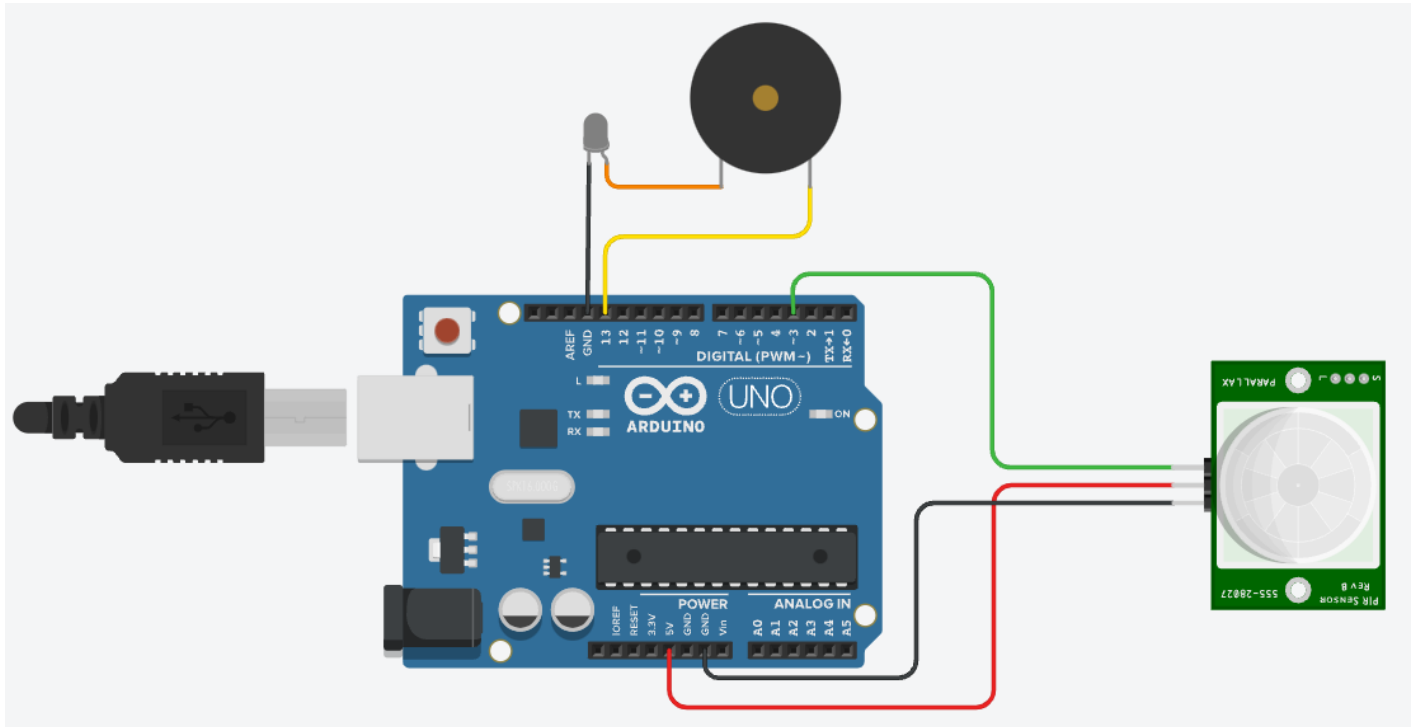
1. Aim :

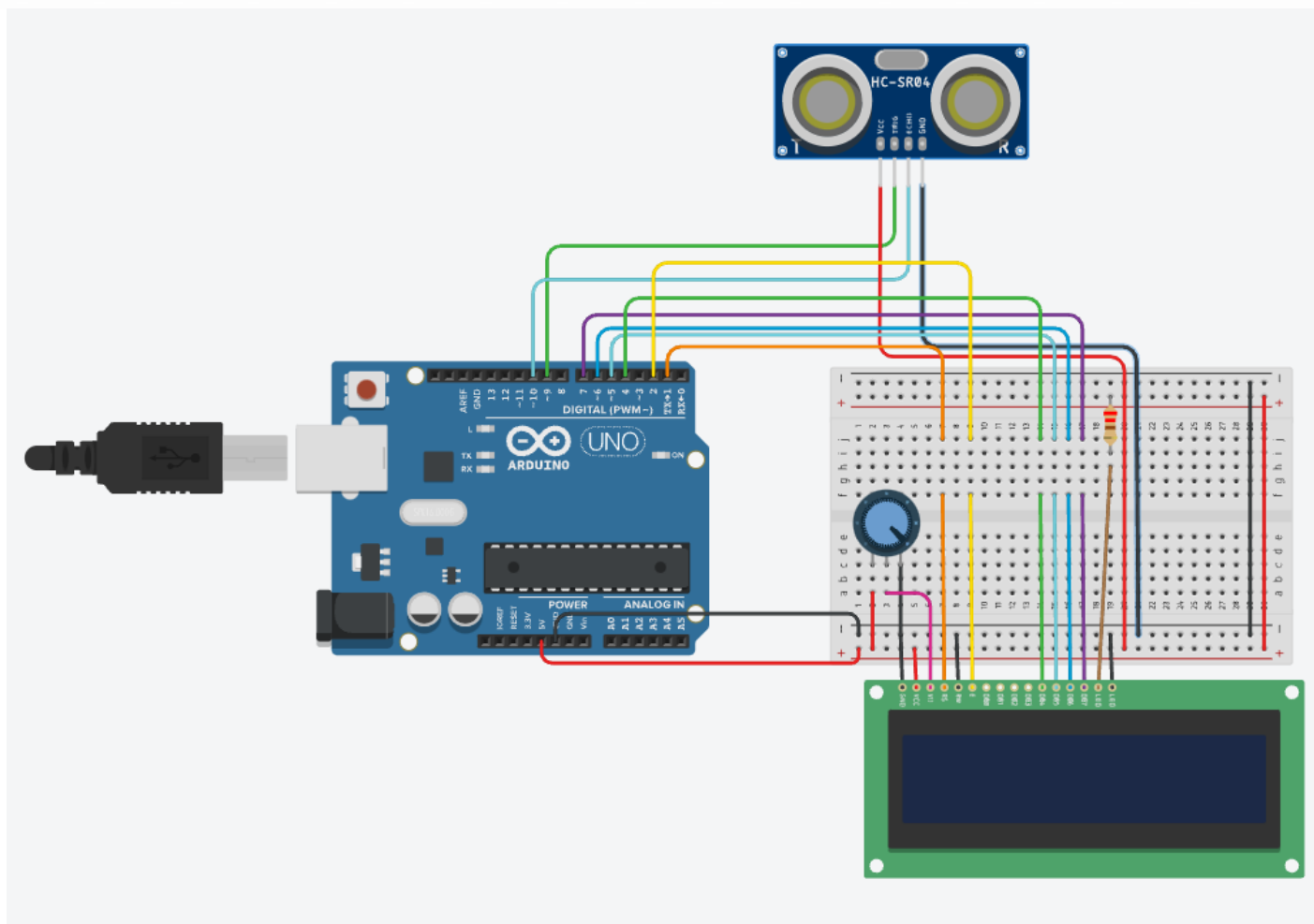
Interfacing of Ultrasonic sensor/PIR sensor with Arduino Uno

2. Requirements :

1. Arduino,
2. Breadboard
3. LED
4. Ultrasound
5. Piezo
6. LED
7. PIR
8. Connecting Wires

3. Steps :





4. Source Code :

```
#include <LiquidCrystal.h>
LiquidCrystal lcd(1, 2, 4, 5, 6, 7); // Creates an LCD object. Pa
const int trigPin = 9;
const int echo Pin = 10;
long duration;
int distancecm, distanceInch;

void setup() {
  lcd.begin(16,2); // Initializes the interface to the LCD screen,
  pinMode (trigPin, OUTPUT);
  pinMode (echoPin, INPUT);
}

void loop() {
  digitalWrite(trigPin, LOW);
  delayMicroseconds (2);
  digitalWrite(trigPin, HIGH);
  delayMicroseconds(10);
  digitalWrite(trigPin, LOW);

  duration = pulseIn(echoPin, HIGH);
  distanceCm= duration * 0.034/2;
  distanceInch = duration*0.0133/2;

  lcd.setCursor(0,0); // sets the location at which subsequent text
  lcd.print("Distance: "); // Prints string "Distance" on the LCD
  lcd.print (distanceCm); // Prints the distance value from the sens
  lcd.print(" cm");
  delay(10);
  lcd.setCursor(0,1);
  lcd.print("Distance: ");
  lcd.print (distance Inch);
  lcd.print("inch");
  delay (9000);
}
```

5. Observations :

