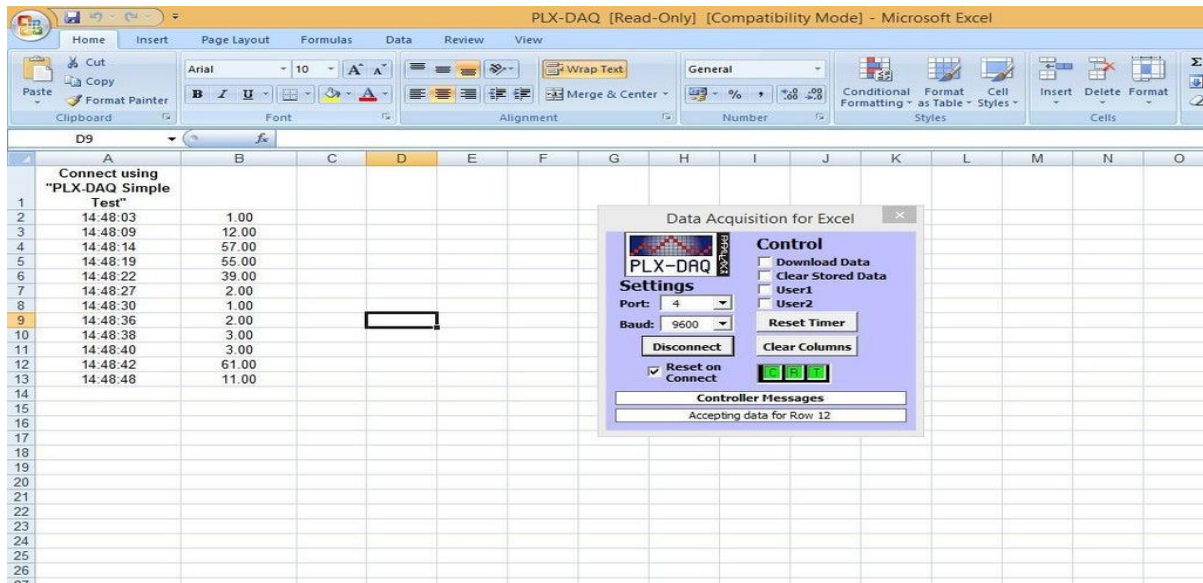
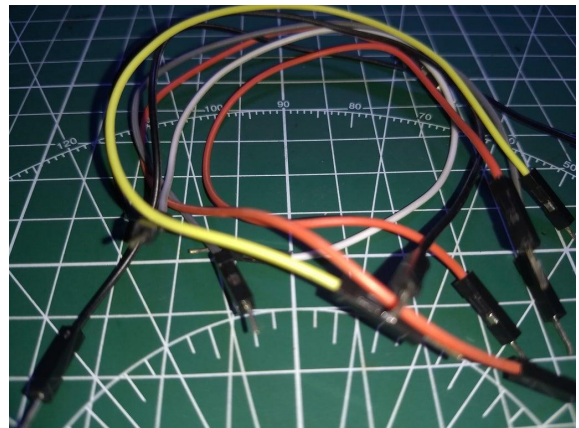
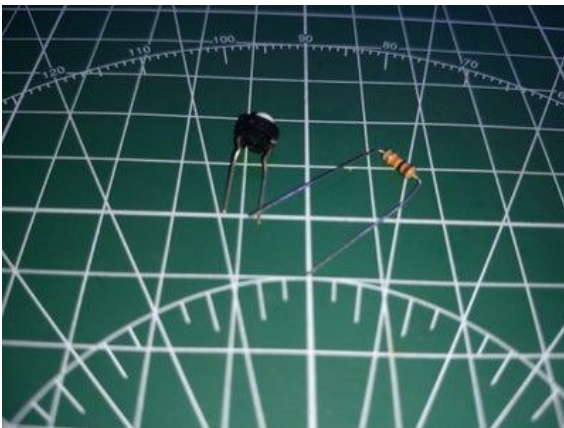


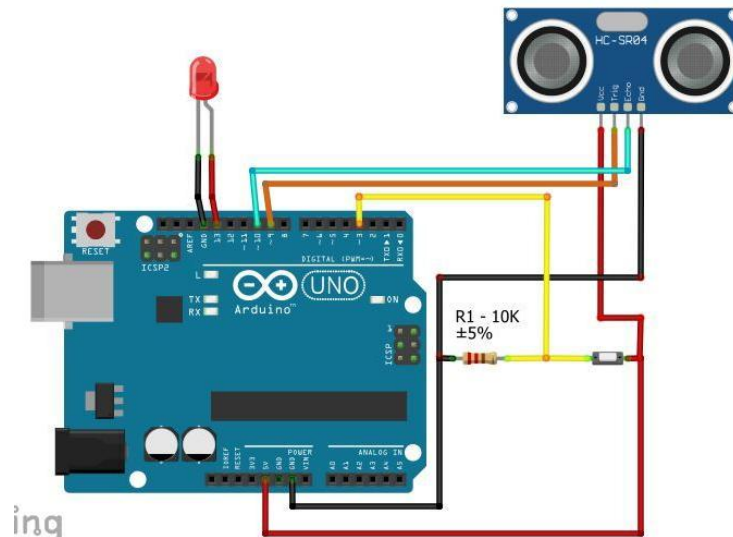
Step 1: Working of the Project



Step 2: Gather the Supplies



Step 3: Circuit Diagram



Now let's do the connections.

Connect the push button to digital pin 3.

Attach the Ultrasonic Sensor's Trigger pin to digital pin 9 and the Echo pin to digital pin 10.

Connect a led to digital pin 13 (optional)

Make sure all the connections are done or else you won't get any data in the excel sheet.

Step 4: Uploading the Code to Your Arduino Board

```
code | Arduino 1.8.3
File Edit Sketch Tools Help
code
const int trigPin=9;
const int echoPin=10;
const int pb=3;
const int led=13;
void setup()
{
  pinMode(trigPin,OUTPUT);
  pinMode(echoPin,INPUT);
  pinMode(pb,INPUT);
  pinMode(led,OUTPUT);
  digitalWrite(led,LOW);
  Serial.begin(9600);
}
void loop()
{
  int state = digitalRead(pb);
  if(state==HIGH)
  {
    for(int i=0;i<1;i++)
    {
      long duration,cm; //DECLARE VARIABLES TO STORE SENSOR O/P
      digitalWrite(trigPin,LOW); //MAKE THE TRIG PIN LOW
      delayMicroseconds(2); //WAIT FOR FEW MICROSECONDS
      digitalWrite(trigPin,HIGH); //NOW SET THE TRIG PIN
      delayMicroseconds(5); //WAIT FOR FEW MICROSECONDS UNTIL THE TRIG PULSE IS SENT
      digitalWrite(trigPin,LOW); //MAKE THE TRIG PIN LOW AGAIN
      duration=pulseIn(echoPin,HIGH); //MAKE ECHO PIN HIGH AND STORE THE BOUNCED PULSE IN VARIABLE DURATION
      cm=duration*0.0343/2; //CONVERT DURATION INTO CM
    }
  }
}
Done Saving.
Global variables use 198 bytes (9%) of dynamic memory, leaving 1850 bytes for local variables. Maximum is 2048 bytes.
Invalid library found in C:\Program Files (x86)\Arduino\libraries\ArduinoJoystickLibrary-master: C:\Program Files (x86)\Arduino\libraries\ArduinoJoystickLibrary-master
Invalid library found in C:\Program Files (x86)\Arduino\libraries\ArduinoJoystickLibrary-master: C:\Program Files (x86)\Arduino\libraries\ArduinoJoystickLibrary-master
33 Arduino/Genuino Uno on COM4
```

Step 5: Installing PLX-DAQ

