Progressive Education Society's

Modern College of Engineering, Pune

**MCA Department A.Y.2024-25**

**(410907) Internet of Things**

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**Class: FY-MCA Shift / Div : A Roll Number : 52119**

**Name: Harsh Ghodke Assignment No: 5 Date of Implementation: 5-10-2024**

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**Q.1)** **Understanding the connectivity of Arduino board circuit with ultrasonic sensor. Write an application program of for measurement of distance.**

**Code:**

#define TRIG\_PIN 3

#define ECHO\_PIN 2

long duration;

float distance;

void setup() {

Serial.begin(9600);

pinMode(TRIG\_PIN, OUTPUT);

pinMode(ECHO\_PIN, INPUT);

}

void loop() {

digitalWrite(TRIG\_PIN, LOW);

delayMicroseconds(2);

digitalWrite(TRIG\_PIN, HIGH);

delayMicroseconds(10);

digitalWrite(TRIG\_PIN, LOW);

duration = pulseIn(ECHO\_PIN, HIGH);

distance = (duration \* 0.0343) / 2;

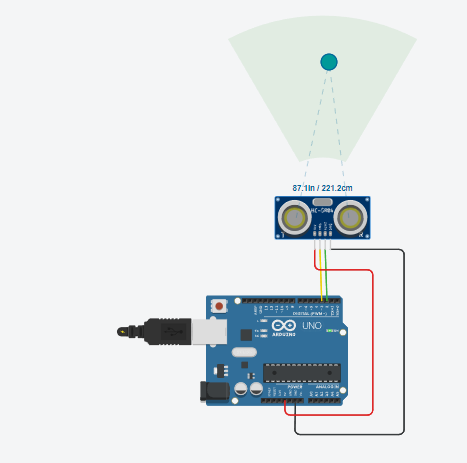
Serial.print("Distance: ");

Serial.print(distance);

Serial.println(" cm");

}

**Output:**

****

****