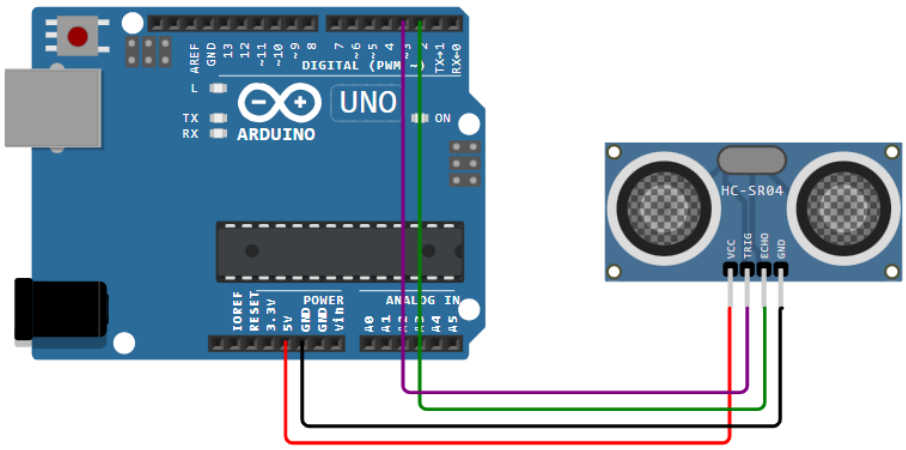
write a Arduino program for implement Distance measure using Ultrasonic sensor .



Arduino Code

```
#define echoPin 2     // Attach pin D2 Arduino to pin Echo
#define trigPin 3     // Attach pin D3 Arduino to pin Trig
long duration;        // Time taken for the pulse to reach receiver
int distance;         // Calculated distance

void setup() {
   pinMode(trigPin, OUTPUT);     // Set trigPin as OUTPUT
   pinMode(echoPin, INPUT);      // Set echoPin as INPUT

   Serial.begin(9600);        // Start serial communication
   Serial.println("Distance measurement using Arduino Uno.");
   delay(500);          // Short delay
}

void loop() {
   digitalWrite(trigPin, LOW);
   delayMicroseconds(2);            // Wait for 2 microseconds

   digitalWrite(trigPin, HIGH);     // Turn on Trigger to generate pulse
   delayMicroseconds(10);           // Keep the trigger "ON" for 10 microseconds
```

```
  digitalWrite(trigPin, LOW);         // Turn off pulse trigger

  duration = pulseIn(echoPin, HIGH);    // Time taken by pulse to reach receiver
  distance = duration * 0.0344 / 2;          // Calculate distance using time

  Serial.print("Distance: ");
  Serial.print(distance);     // Print distance in serial monitor
  Serial.println(" cm");
  delay(100);           // Short delay
}
```