

```
#define TRIG_PIN 10 // Trigger pin  
connected to Arduino pin 9  
#define ECHO_PIN 11 // Echo pin  
connected to Arduino pin 10
```

```
long duration;  
int distance;
```

```
void setup() {  
  pinMode(TRIG_PIN, OUTPUT);  
  pinMode(ECHO_PIN, INPUT);  
  Serial.begin(9600); // Start serial  
communication  
}
```

```
void loop() {  
  // Clear the trigger pin  
  digitalWrite(TRIG_PIN, LOW);  
  delayMicroseconds(2);  
  
  // Send a 10 microsecond pulse to trigger
```

```
digitalWrite(TRIG_PIN, HIGH);
delayMicroseconds(10);
digitalWrite(TRIG_PIN, LOW);

// Read the echo pin (time in
microseconds)
duration = pulseIn(ECHO_PIN, HIGH);

// Calculate distance (speed of sound =
343 m/s)
distance = duration * 0.034 / 2; // in cm

// Print result
Serial.print("Distance: ");
Serial.print(distance);
Serial.println(" cm");

delay(200); // half a second delay before
next reading
}
```