



Aim: Design a system to measure the distance between objects.

HARDWARE REQUIRED:

- Arduino - Board
- Ultrasonic sensor

CODE :-

```
int trigPin = 4;
int echoPin = 2;
long duration, cm, inches;
```

```
void setup() {
  Serial.begin(9600);
  pinMode(trigPin, OUTPUT);
  pinMode(echoPin, INPUT);
}
```

```
void loop()
{
  digitalWrite(trigPin, LOW);
  delayMicroseconds(5);
  digitalWrite(trigPin, HIGH);
  delayMicroseconds(10);
  digitalWrite(trigPin, LOW);
```

Teacher's Signature : _____


```
pinMode(echoPin, INPUT);  
duration = pulseIn(echoPin, HIGH);
```

```
cm = (duration/2) / 29.1;  
inches = (duration/2) / 74;  
Serial.print("Distance : ");  
Serial.print(inches);  
Serial.print(" in");  
Serial.print(cm);  
Serial.print(" cm");  
Serial.println();
```

```
delay(250);  
}
```