

Object Distance Measurement

Aim: Design a system to measure the distance betⁿ objects

Hardware requirement: Arduino, connecting wires, Ultrasonic Distance sensor

```
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);
```

```
delay
  digitalWrite(trigPin, HIGH);
  delayMicroseconds(10);
```

```
  digitalWrite(trigPin, LOW);
  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);

}