



```
int t = 2;
int e = 3;
void setup()
{
    Serial.begin(9600);
    pinMode(12, OUTPUT);
    pinMode(t, OUTPUT);
    pinMode(e, INPUT);
    pinMode(4, INPUT);
    pinMode(13, OUTPUT);
}

void loop()
{
    digitalWrite(12, HIGH);
    Serial.println("LED ON");
    digitalWrite(t, LOW);
    digitalWrite(t, HIGH);
    delayMicroseconds(10);
    digitalWrite(t, LOW);
    float dur = pulseIn(e, HIGH);
    float dis = (dur*0.0343)/2;
    Serial.print("Distance is");
    Serial.println(dis);
    int p = digitalRead(4);
    Serial.println(p);
}
```

```
if (p)
```

```
    Serial.println("Motion Detected!!!");
```

```
    delay(1000);
```

```
    tone(12,30);
```

```
    delay(100);
```

```
}
```