```
const int pingPin = 7;
const int ledPin = 13;
void setup() {
Serial.begin(9600);
pinMode(ledPin, OUTPUT);
}
void loop() {
long duration, cm;
pinMode(pingPin, OUTPUT);
digitalWrite(pingPin, LOW);
delayMicroseconds(2);
digitalWrite(pingPin, HIGH);
delayMicroseconds(5);
digitalWrite(pingPin, LOW);

pinMode(pingPin, INPUT);
duration = pulseIn(pingPin, HIGH);

cm = microsecondsToCentimeters(duration);

Serial.print(&quot;Distance: &quot;);
Serial.print(cm);
Serial.print(&quot;cm&quot;);

Serial.println();

if(cm &lt; 100) {
digitalWrite(ledPin, HIGH);
```

```
}
else {
digitalWrite(ledPin, LOW);
}
delay(100);
}

long microsecondsToCentimeters(long microseconds) {
return microseconds / 29 / 2;const int pingPin = 7;
const int ledPin = 13;
void setup() {
Serial.begin(9600);
pinMode(ledPin, OUTPUT);
}
void loop() {
long duration, cm;
pinMode(pingPin, OUTPUT);
digitalWrite(pingPin, LOW);
delayMicroseconds(2);
digitalWrite(pingPin, HIGH);
delayMicroseconds(5);
digitalWrite(pingPin, LOW);

pinMode(pingPin, INPUT);
duration = pulseIn(pingPin, HIGH);

cm = microsecondsToCentimeters(duration);
```

```
Serial.print(&quot;Distance: &quot;);
Serial.print(cm);
Serial.print(&quot;cm&quot;);

Serial.println();

if(cm &lt; 100) {
digitalWrite(ledPin, HIGH);
}
else {
digitalWrite(ledPin, LOW);
}
delay(100);
}

long microsecondsToCentimeters(long microseconds) {
return microseconds / 29 / 2;
```