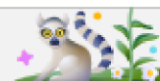


CONNECTION IN WOKWI FOR THE ULTRASONIC SENSOR



```
1  const int TRIG_PIN = 7 ;
2  const int ECHO_PIN = 8;
3  const unsigned int MAX_DIST = 23200;
4  void setup() {
5      pinMode(TRIG_PIN, OUTPUT);
6      digitalWrite(TRIG_PIN, LOW);
7      pinMode(ECHO_PIN, INPUT ) ;
8      Serial.begin(9600);
9  }
10 void loop() {
11     unsigned long t1;
12     unsigned long t2;
13     unsigned long pulse_width;
14     float cm;
15     float inches;
16     digitalWrite(TRIG_PIN, HIGH);
17     delayMicroseconds(10);
18     digitalWrite(TRIG_PIN, LOW);
19     while (digitalRead( ECHO_PIN )==0 );
20     t1= micros ();
21     while (digitalRead(ECHO_PIN) == 1);
22     t2= micros ();
23     pulse_width = t2-t1;
24     cm=pulse_width / 58 ;
25     inches = pulse_width/148.0;
26     if (pulse_width >MAX_DIST){
27         Serial.println("Out of range");
28     } else {
29         Serial.println("*****");
30         Serial.print("The Measured Distance in cm: ");
31         Serial.println(cm);
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CODING:

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  digitalWrite(TRIG_PIN, LOW);
  pinMode(ECHO_PIN, INPUT ) ;
  Serial.begin(9600);
} void loop() {    unsigned long t1;
unsigned long t2;      unsigned long
pulse_width;    float cm;      float
inches;  digitalWrite(TRIG_PIN,
HIGH);  delayMicroseconds(10);
digitalWrite(TRIG_PIN, LOW);  while
(digitalRead( ECHO_PIN )==0 );    t1=
micros ();    while
(digitalRead(ECHO_PIN) == 1);
t2= micros ();    pulse_width =
t2-t1;    cm=pulse_width / 58 ;
inches = pulse_width/148.0;  if
(pulse_width >MAX_DIST){
Serial.println("Out of range");
} else {
Serial.println("*****");
Serial.print("The Measured Distance in cm: ");
Serial.println(cm);  if( cm < 100 ){
    Serial.println("Alert!!");
}
Serial.print("*****");
}  delay(1000);
}
```

