

```

int trig = 2;
int echo = 3;
void setup()
{
  pinMode(trig,OUTPUT);
  pinMode(echo,INPUT);
  Serial.begin(9600);
  pinMode(7,OUTPUT);
  pinMode(8,OUTPUT);
  pinMode(13,INPUT);
  pinMode(1,OUTPUT);
}

void loop()
{

  digitalWrite(trig,LOW);
  digitalWrite(trig,HIGH);
  delayMicroseconds(10);
  digitalWrite(trig,LOW);
  float dur = pulseIn(echo,HIGH);
  float dist = (dur*0.0343)/2;
  Serial.print("Distance");
  Serial.println(dist);
  if(dist>=100){
    digitalWrite(7,HIGH);
    delay(100);
  }
  else{
    digitalWrite(7,LOW);
    delay(100);
  }
  double a=analogRead(A1);
  Serial.print("Adc Value:");
  Serial.println(a);
  double v= a/1024;
  double tvolt= v*5;
  Serial.print("temp value voltage:");
  Serial.println(tvolt);
  double o = tvolt-0.5;
  double t= o*100;
  Serial.print ("Temperature is :");
  Serial.println(t);
  if (t>=300)
  {
    digitalWrite(8,HIGH);
  }
}

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    delay(1000);
}
else
{
    digitalWrite(8,LOW);
    delay(1000);
}
int m = digitalRead(13);
Serial.print("Motion detector");
Serial.println(m);
if(m == 1){
    Serial.println("yes");
    digitalWrite(1,HIGH);
}
else{
    Serial.println("No");
    digitalWrite(1,LOW);
}
}
```