

```
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()

{

    int i = 0;

    for( i = 0; i<5;i++){

        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);  
}  
}  
  
int j = 0;  
for(j = 0;j<5;j++){  
    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);
```

```
    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);  
}  
}
```