

```

void setup()
{
  pinMode(7, OUTPUT);
  Serial.begin(9600);
  pinMode(8,OUTPUT);
  pinMode(2,OUTPUT);
}

void loop()
{
  double a=analogRead(A0);
  Serial.print("Adc Value:");
  Serial.println(a);
  double v= a/1024;
  double tvolt= v*5;
  Serial.print("temp value voltage:");
  Serial.println(tvolt);
  delay(1000);
  double o = tvolt - 0.5;
  double t= o*100;
  Serial.print("Temperature is :");
  Serial.println(t);
  delay(1000);
  if (t>=30)
  {
    digitalWrite(7,HIGH);
    delay(1000);
  }
  else
  {
    digitalWrite(7,LOW);
    delay(1000);
  }
  int m = digitalRead(4);
  Serial.print("Motion detector");
  Serial.println(m);
  if(m == 1){
    Serial.println("Motion Occur");
    digitalWrite(8,HIGH);
    digitalWrite(2,HIGH);
  }
  else{
    Serial.println("No");
    digitalWrite(8,LOW);
    digitalWrite(2,LOW);
  }
}

```