



```
// C++ code
//
void setup()
{Serial.begin(9600);
  pinMode(2,INPUT);
  pinMode(13,OUTPUT);
}

void loop()
{
  int motion=digitalRead(2);
  double tempdata=analogRead(A4);
  double n=tempdata/1024;
  double volt=n*5;
  double off =volt-0.5;
  double temperature=off*100;
  double degree= 65;

  if (motion==1){
    digitalWrite(13,HIGH);
    delay(1000);
    digitalWrite(13,HIGH);
    delay(1000);
    Serial.println("motion detected");
  }
  else{
```

```
    digitalWrite(13,LOW);  
    Serial.println("motion is not detected");  
}
```

```
if (temperature> degree) {  
    digitalWrite(13,HIGH);  
    Serial.println("temperature:");  
    Serial.println(temperature);  
}  
else {  
    digitalWrite(13,LOW);  
    Serial.println("temperature:");  
    Serial.println(temperature);  
}
```

```
}
```