

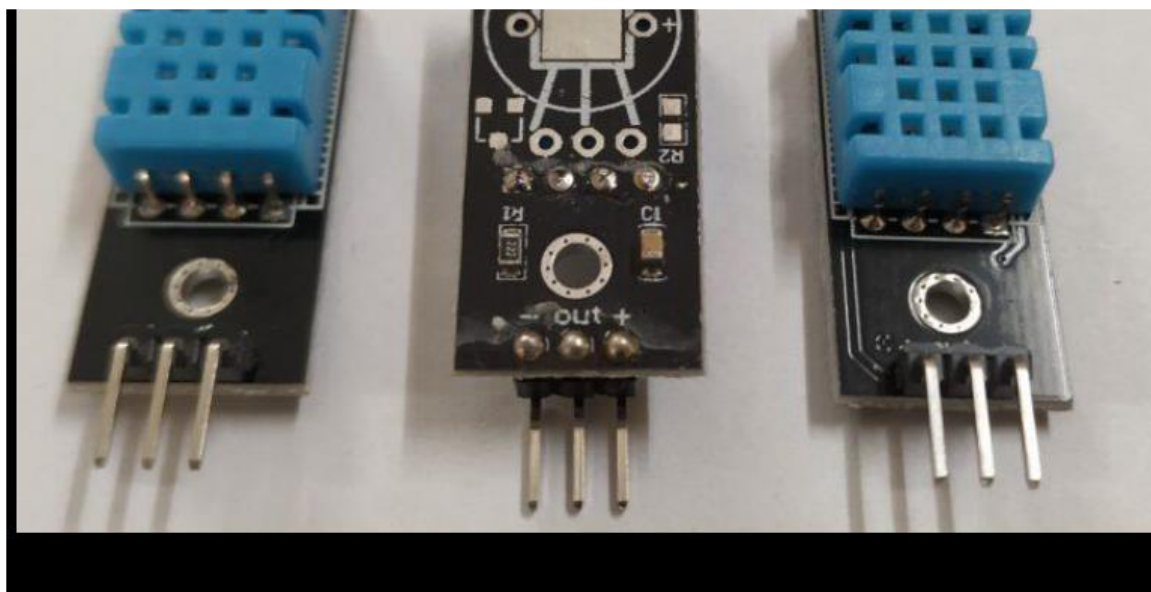
Alarm system to high
Temperature
Assignment -2

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BUILD A PYTHON CODE,ASSUME U GET TEMPERATURE AND HUMIDITY VALUE AND WRITE A CONDITION TO CONTINUOUSLY DETECT ALARM IN CASE OF HIGH TEMPERATURE:

discuss interacting DHT11 with Raspberry Pi and see it working using Python code. Also, This article, we'll we'll display real-time Data on the 16×2 LCD. The code and explanation used in the code will be explained further below also all the modules regarding 16×2 LCD will be included with its article home page. So let's begin.

DHT-11



- It is the most common and famous temperature and humidity combined sensor you'll ever come to know. It has many tutorials with boards similar to Arduino.

- You may visit It's Arduino Tutorial to have a more clear Idea of Its working if you are

working so, here we are giving you the tutorial on how to connect dht11 with Raspberry Pi.

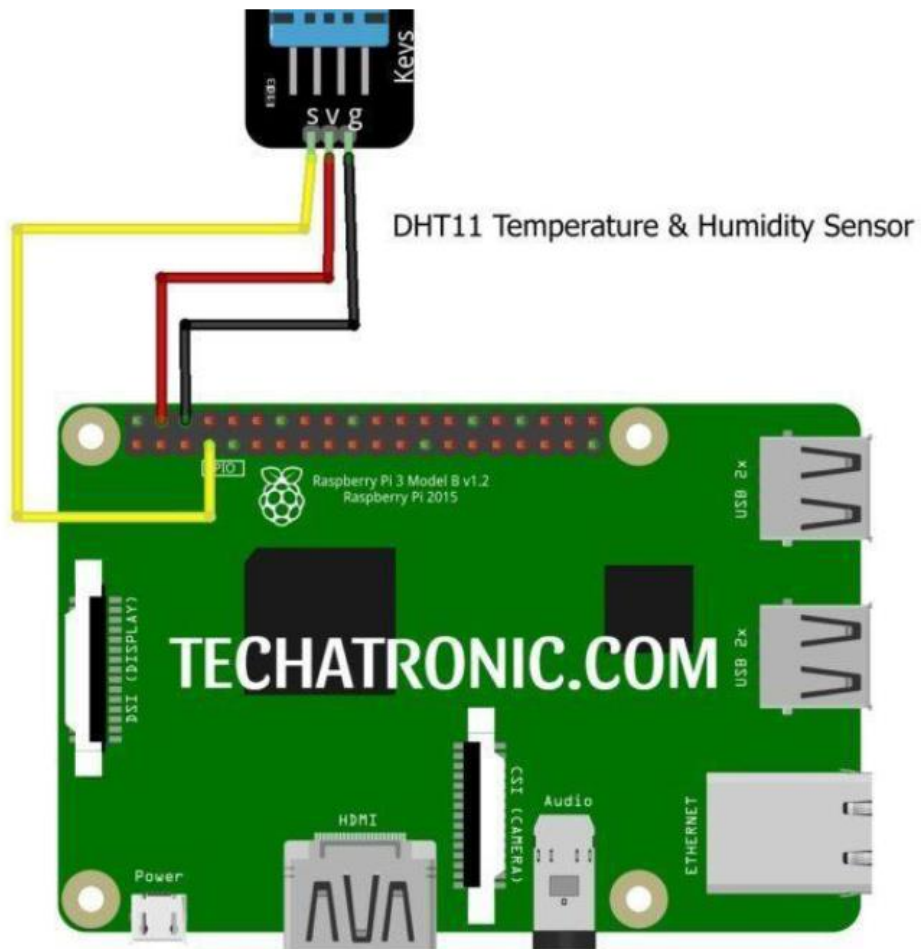
- DHT11 is a simple sensor and has a very simple structure for measuring temperature and humidity. Basically, it is an enclosed structure that consists of two wires which are responsible for checking humidity and temperature.

Material Requirement



- .Raspberry Pi with keyboard and mouse. Or
putty terminal.
- .Breadboard
- Jumper wires
- DHT11 Sensor

DHT11 with Raspberry pi Circuit Diagram



Raspberry Pi

Import Adafruit_DHT

```
DHT11=Adafruit_DHT.DHT11 #  
Adafruit_DHT.DHT22 for DHT22 sensor.  
While True:  
    Try:  
        Temp,humid=Adafruit_DHT.read_retry(DHT11,4)  
        # 4 is the GPIO number you can change this to  
        your required need  
        Print("TEMP={0:0.1f}°C  
        HUMIDITY={1:0.1f}%".format(temp,humid))  
    Except KeyboardInterrupt:  
        Break
```

- The first line as we have said we have imported the library for the DHT11 Sensor to work i.e., `Adafruit_DHT`. You can use this library with DHT22 also, but you need to change the DHT11 object line.
- Then we create a DHT object which store the DHT11 sensor configuration details and further in code we use this object name to refer to all working statements.
- Next we create an infinite while loop within Try and except method to create a

- keyboard interrupt terminating condition i.e., Ctrl+C
- In next line we read data from the DHT11 sensor and stores it in two variable as two values are being received, one for temperature and other for humidity.

CODING:

```
#!/usr/bin/python
import struct, array, time,
io, fcntl
I2C_SLAVE=0x0703
```