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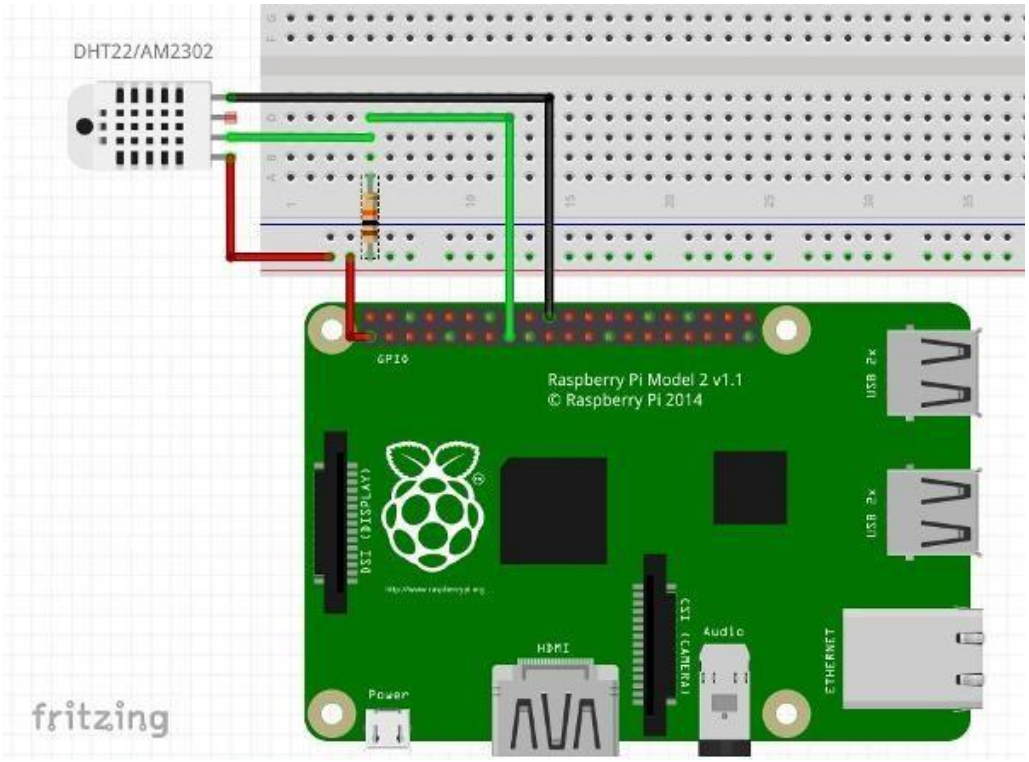
Measure temperature and humidity with the sensor DHT22/AM2302

DHT.AM2302 is a sensor to measure temperature and humidity and Adafruit has implemented a Raspberry Pi driver for the sensor.

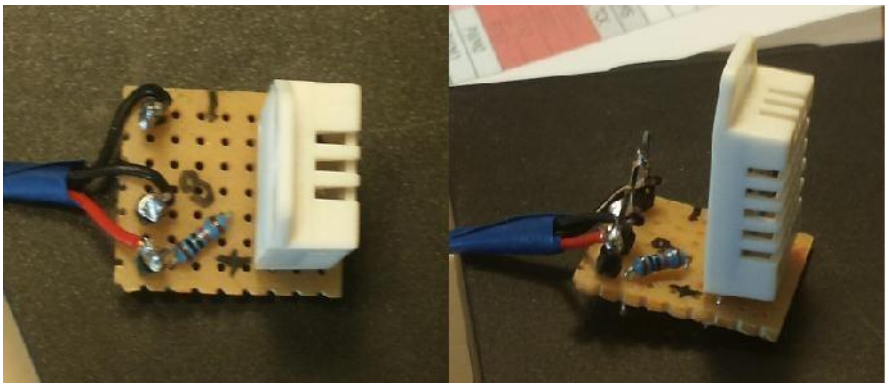
Breadboard circuit

The circuit is very simple. Just attach the leftmost sensor pin to the Pin 1 for 3.3V VCC, the second leftmost sensor pin to Pin 15 for data transmission and the rightmost sensor pin to a ground pin like Pin 20 of the Raspberry Pi (all in Board numbering):



Breadboard circuit for DHT22/Am2302

The assembled DHT22/AM.2302 sensor



The assembled circuit: temperature and humidity sensor dht22/AM2302

Install sensor drivers

```
$ git clone https://github.com/adafruit/Adafruit_Python_DHT
$ sudo apt-get install build-essential python-dev
$ cd Adafruit_Python_DHT
$ sudo python setup.py install
$ cd ..
```

Test the installation in python

Open python with

```
$ sudo python
```

and enter

```
import Adafruit_DHT
# the sensors output pin is connect to board pin number 15
# which is GPIO numbering pin 22.
Adafruit_DHT.read_retry(Adafruit_DHT.AM2302, '22')
```

If everything is fine, this outputs the current temperature and humidity with the first value being the humidity.

Update: Python 3

Execute the following commands for the Python3-version of the Adafruit driver:

```
$ git clone https://github.com/JoBergs/Adafruit_Python_DHT
$ sudo apt-get install build-essential python3-dev
$ cd Adafruit_Python_DHT
$ sudo python3 setup.py install
$ cd ..
```