

- Python 설치

sudo apt-get update

sudo apt-get upgrade

sudo apt-get install python3-pip

sudo python3 -m pip install --upgrade pip setuptools wheel

sudo pip3 install Adafruit_DHT

git clone https://github.com/adafruit/Adafruit_Python_DHT.git

cd Adafruit_Python_DHT

sudo apt-get update

sudo apt-get install build-essential python-dev python-openssl

sudo python setup.py install

https://www.shareedit.co.kr/posts/8407?fbclid=IwAR2NOSplizw-emH4VMPeZFCidl-Nut026EFiWAgDPwVg_2LIXBmG6TOcVqU

https://steemit.com/kr/@codingart/4-3-adafruit-dht11-3?fbclid=IwAR2BXuwqsvKGY1Jf143EAmSzNv_D6-Ctj1VI11Q9wuvayzJekd4RL2eTpco

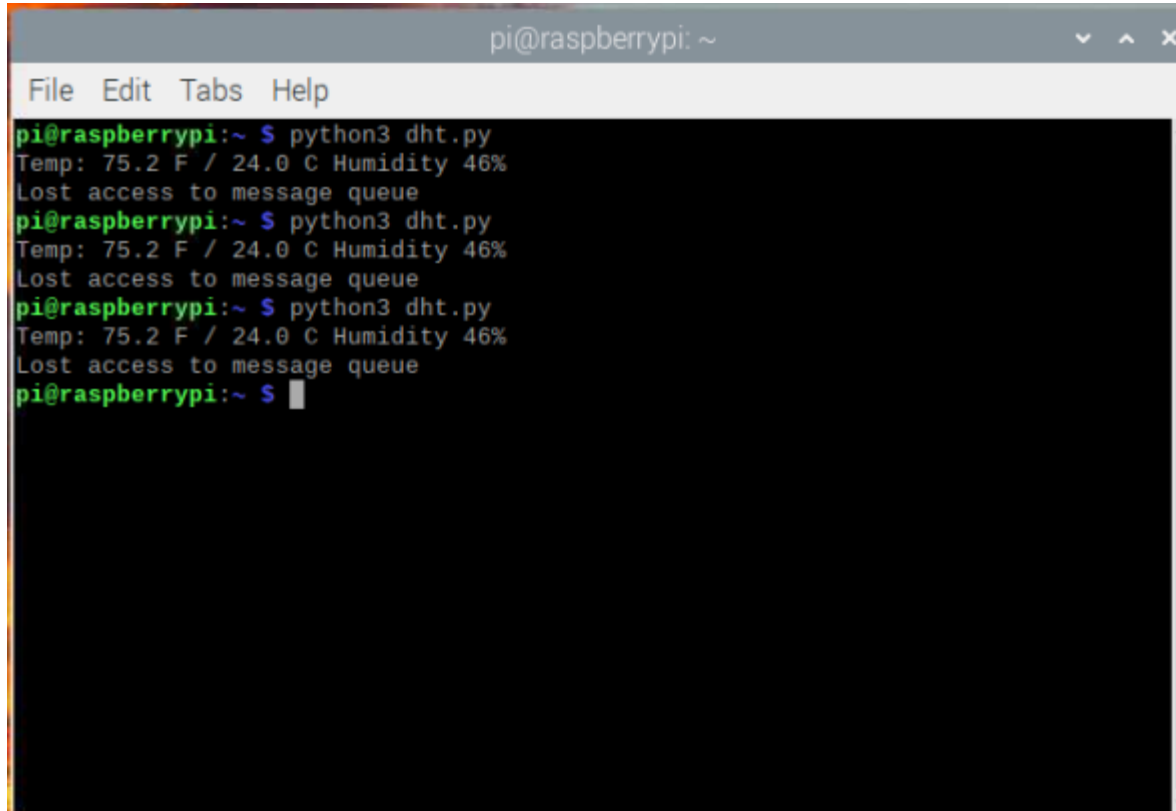
- 파일 생성 후 작동

sudo nano dht.py

-> 코드 작성

-> Ctrl+s -> ctrl+x

-> python dht.py로 실행



```
pi@raspberrypi: ~
File Edit Tabs Help
pi@raspberrypi:~ $ python3 dht.py
Temp: 75.2 F / 24.0 C Humidity 46%
Lost access to message queue
pi@raspberrypi:~ $ python3 dht.py
Temp: 75.2 F / 24.0 C Humidity 46%
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pi@raspberrypi:~ $ python3 dht.py
Temp: 75.2 F / 24.0 C Humidity 46%
Lost access to message queue
pi@raspberrypi:~ $
```

```
import time
import board
import adafruit_dht
```

```
dhtDevice = adafruit_dht.DHT11(board.D4)
t = dhtDevice.temperature
f = t * (9/5)+32
h = dhtDevice.humidity
```

```
print("Temp: {:.1f} F / {:.1f} C Humidity {}".format(f,t,h))
```

- 2번째 예제

```
pi@raspberrypi:~ $ python3 cron_dht.py  
Time : 2022-09-27 00:07:07 Temperature = 24.0°C Humidity = 47.0%
```

```
import datetime  
import adafruit_dht  
import requests  
import board
```

```
dhtDevice = adafruit_dht.DHT11(board.D4)  
temp = dhtDevice.temperature  
hum = dhtDevice.humidity
```

```
print("Time : {0:%Y-%m-%d %H:%M:%S} Temperature = {1:0.1f}*C Humidity =  
{2:0.1f}%".format(datetime.datetime.now(), temp, hum))
```

```
if hum is not None and temp is not None :  
    params = {'dev':1, 't':temp, 'h':hum}  
    r = requests.get(url='http://xxx.co.kr/raspberyPI/setDevInfo.php', params=params)  
    print(r.status_code)
```

https://github.com/adafruit/Adafruit_CircuitPython_DHT/issues/28

오류 1 : py파일 작동 시 아래와 같은 오류

해결방안 : sudo apt-get install libgpiod2

```
>>> dht = dht11.DHT11Sensor()
/home/pi/sensor-node-aqs/venv/lib/python3.5/site-packages/adafruit_blinka/microcontroller/bcm283x/pulseio/libgpiod_pulsein: error while loading shared libraries: libgpiod.so.2: cannot open shared object file: No such file or directory
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
  File "/home/pi/sensor-node-aqs/src/sensornode/sensingmodule/sensors/dht11.py", line 8, in __init__
    self._dht = adafruit_dht.DHT11(board.D4)
  File "/home/pi/sensor-node-aqs/venv/lib/python3.5/site-packages/adafruit_dht.py", line 246, in __init__
    super().__init__(True, pin, 18000)
  File "/home/pi/sensor-node-aqs/venv/lib/python3.5/site-packages/adafruit_dht.py", line 66, in __init__
    self.pulse_in = PulseIn(self._pin, 81, True)
  File "/home/pi/sensor-node-aqs/venv/lib/python3.5/site-packages/adafruit_blinka/microcontroller/bcm283x/pulseio/PulseIn.py", line 64, in __init__
    message = self._wait_receive_msg()
  File "/home/pi/sensor-node-aqs/venv/lib/python3.5/site-packages/adafruit_blinka/microcontroller/bcm283x/pulseio/PulseIn.py", line 80, in _wait_receive_msg
    raise RuntimeError("Timed out waiting for PulseIn message")
RuntimeError: Timed out waiting for PulseIn message
```

오류 2 : py파일 작동 후 재동작 시 unable 오류

<https://forums.adafruit.com/viewtopic.php?t=169472>

해결방안 : `pgrep libgpod_pulsein` -> `killall libgpod_pulsein`

```
Shell
Python 3.9.2 (/usr/bin/python3)
>>> %cd /home/pi
>>> %Run dht.py
    Temp: 75.2 F / 24.0 C Humidity 47%
>>> %Run dht.py
    Unable to set line 18 to input
```

```
pi@raspberrypi:~ $ killall libgpod_pulsein
```

```
Python 3.9.2 (/usr/bin/python3)
>>> %Run cron_dht.py
    Unable to set line 4 to input
```

```
Python 3.9.2 (/usr/bin/python3)
>>> %Run cron_dht.py
    Time : 2022-09-27 00:05:12 Temperature = 24.0*C Humidity = 46.0%
```

파이썬 오류 시 참고 자료

<https://bradheo.tistory.com/entry/%EB%9D%BC%EC%A6%88%EB%B2%A0%EB%A6%AC%ED%8C%8C%EC%9D%B4-%EC%98%A8%EC%8A%B5%EB%8F%84-%EC%84%BC%EC%84%9Cdht11>

<https://stackoverflow.com/questions/64093805/adafruit-python-dht-raspberry-pi-in-get-platform-runtimeerror-unknown-platf>

<https://gorakgarak.tistory.com/686>

<https://forums.adafruit.com/viewtopic.php?p=688382&sid=2e3352f4d9928c57fd3fdeacd07bff6b#p688382>

<https://m.blog.naver.com/PostView.naver?isHttpsRedirect=true&blogId=top60331&logNo=221282025014>