# Device Backend Script -> Azure Cloud

\*\*Note: Deployed locally to check if its working completely:

## Requirement:

visual studio code for debugging in pi or you can use any default one.

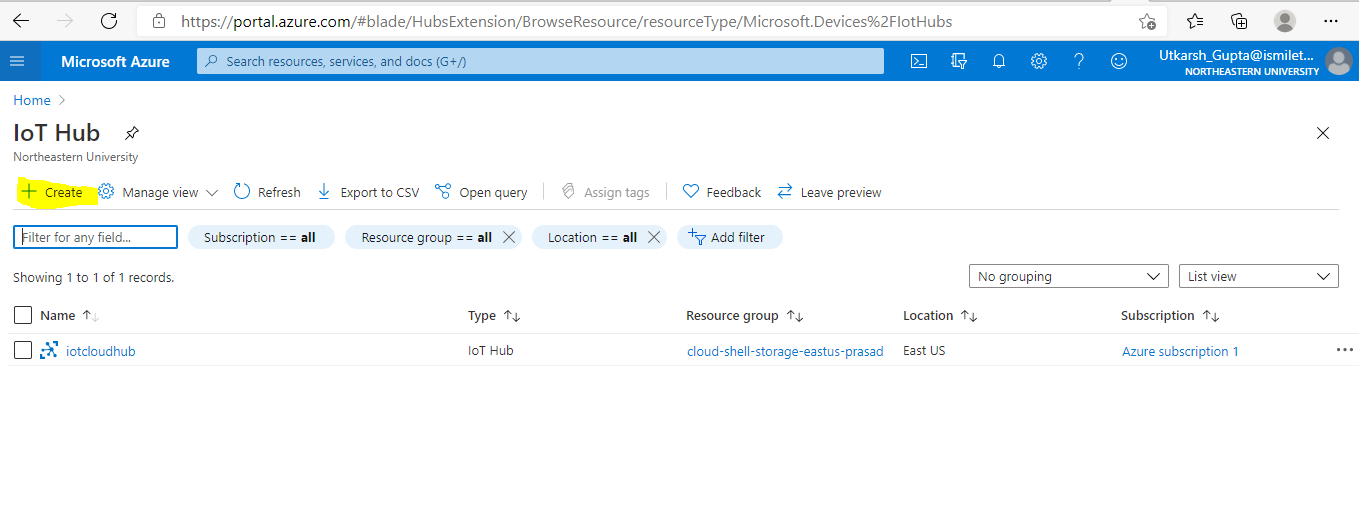
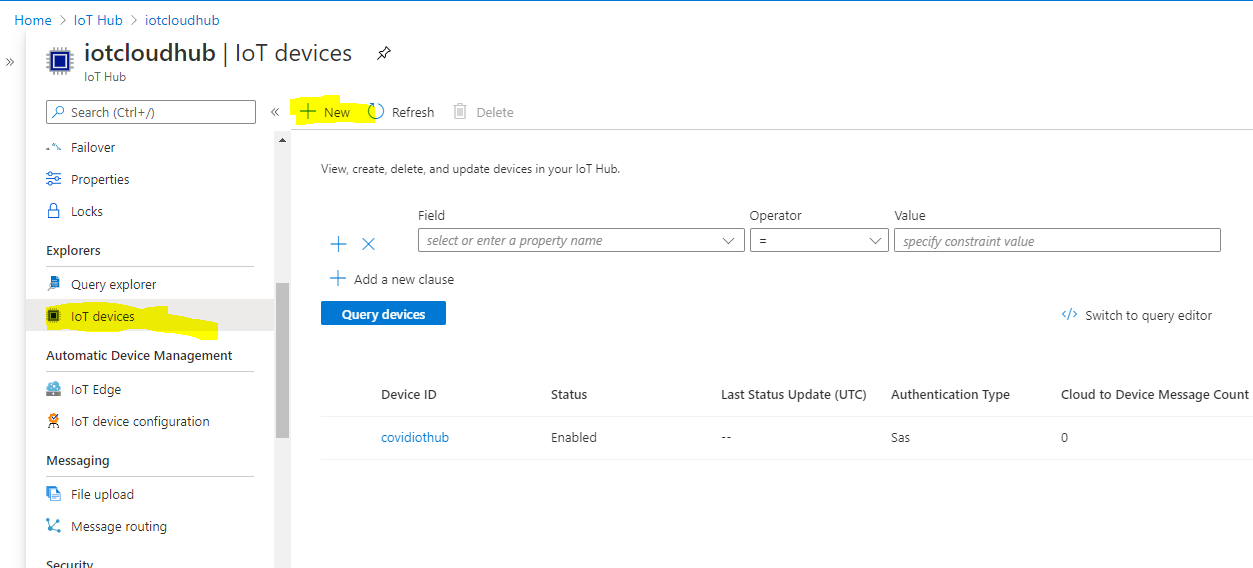
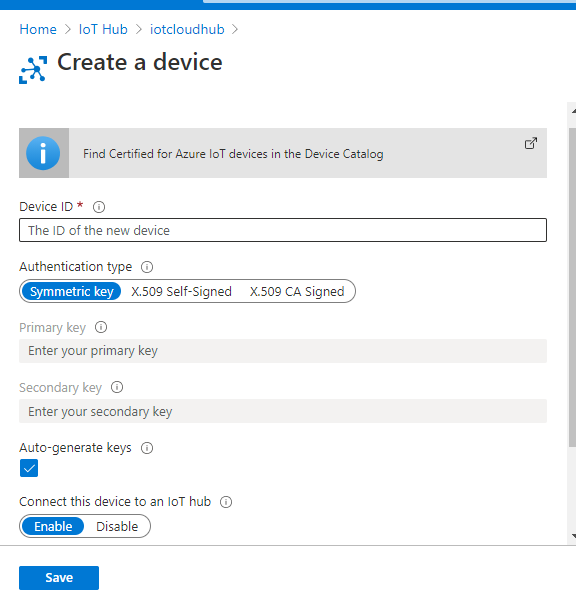
Python > 3.6

Install all the dependencies by running

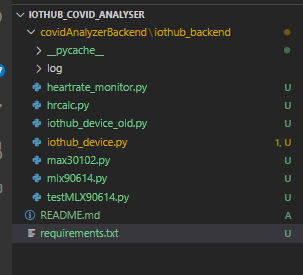
pip install -r requirements.txt

IoTHub Device

Setup IotHub Device

* Create a new Iot Hub device for a new device
* Provide some Device ID name and leave primary key default

## Folder Structure:



* Iothub\_device.py is a main python file which is establishing connection with azure cloud
* Requirements.txt have all the libraries dependencies which is needed before deploying backend program
* Max30102.py is the file to communicate with oximeter sensor, it sending commands through i2c,
* Heartrate\_monitor.py, hrcalc.py are the supporting files for oximeter sensor those are helping us to calculate and measure.
* Max90614.py is the file to parse values from temperature sensor.

## Iothub\_device.py

Check before debugging:   
Get device connection string from iothub

Examples,

“HostName=iotcloudhub.azure-devices.net;DeviceId=covidiothub;SharedAccessKey=W4z4qLw1wjDR0eDBKNZLChXkog3Cadtsj1G9fJFRn8E=”

“HostName=<your iot cloud hub>.azure-devices.net; DeviceId=covidiothub;SharedAccessKey=xjbIhUQxccyMOIpDv6bcOXBYJCFSqN3uHTQZ4YVz8nA=”

And update it inside iothub\_device.py for every new iot device connection:

