Prerequisites

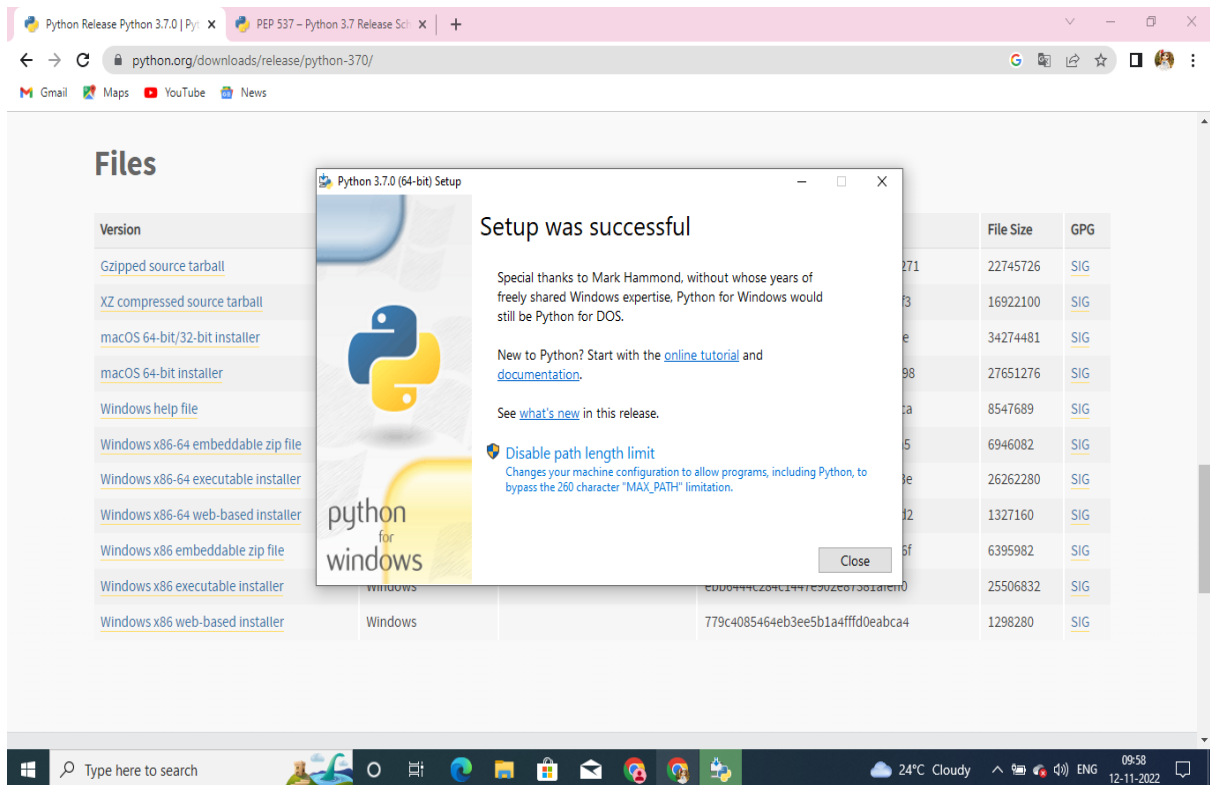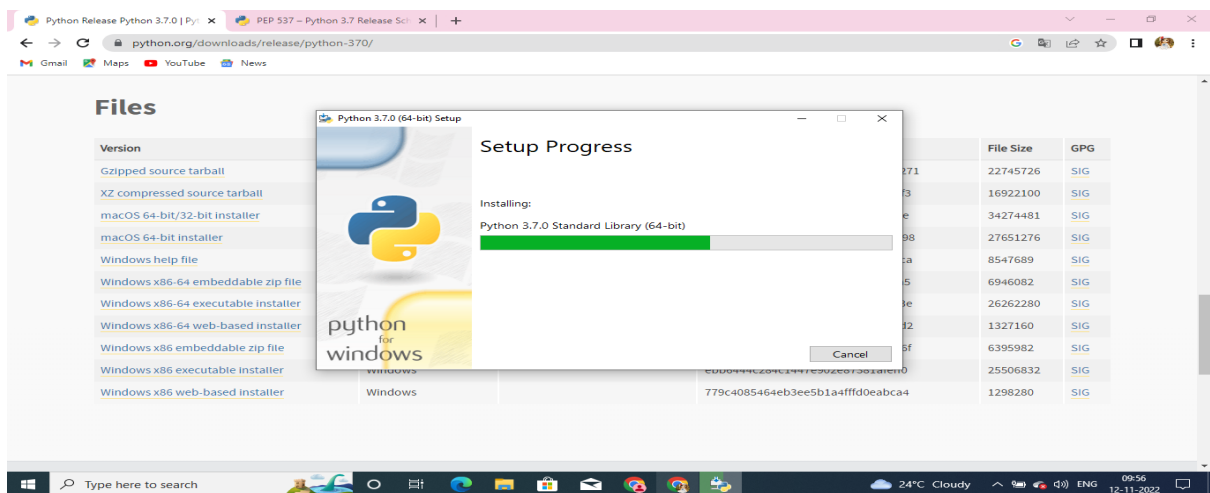## Software:

Install the python IDLE:

Step-1

Python installation v-3.7.0(64 bit)

Step-2:

- Pip install wiotp-sdk
- Pip install ibmcloudant
- Pip install opencv-python
- Pip install pyzbar

Administrator: Command Prompt

```
cloudant) (1.26.12)
Requirement already satisfied: six>=1.5 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from python_dateutil<3.0.0,>=2.5.3->ibmcloudant) (1.16.0)
Requirement already satisfied: charset-normalizer<3,>=2 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from requests<3.0,>=2.20->ibmcloudant) (2.1.1)
Requirement already satisfied: idna<4,>=2.5 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from requests<3.0,>=2.20->ibmcloudant) (3.4)
Requirement already satisfied: certifi>=2017.4.17 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from requests<3.0,>=2.20->ibmcloudant) (2022.9.24)

C:\Windows\system32>pip install opencv-python
Collecting opencv-python
  Using cached opencv_python-4.6.0.66-cp36-abi3-win_amd64.whl (35.6 MB)
Collecting numpy>=1.14.5
  Downloading numpy-1.21.6-cp37-cp37m-win_amd64.whl (14.0 MB)
     ---------------------------------------- 14.0/14.0 MB 340.9 kB/s eta 0:00:00
Installing collected packages: numpy, opencv-python
Successfully installed numpy-1.21.6 opencv-python-4.6.0.66

C:\Windows\system32>pip install pyzbar
Collecting pyzbar
  Using cached pyzbar-0.1.9-py2.py3-none-win_amd64.whl (817 kB)
Installing collected packages: pyzbar
Successfully installed pyzbar-0.1.9

C:\Windows\system32>pip install paho-mqtt
Requirement already satisfied: paho-mqtt in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (1.6.1)

C:\Windows\system32>pip install wiotp-sdk
Requirement already satisfied: wiotp-sdk in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (0.11.0)
Requirement already satisfied: iso8601>=0.1.12 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (1.1.0)
Requirement already satisfied: pytz>=2018.9 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (2022.6)
Requirement already satisfied: pyyaml>=3.13 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (6.0)
Requirement already satisfied: paho-mqtt>=1.5.0 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (1.6.1)
Requirement already satisfied: requests>=2.21.0 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (2.28.1)
Requirement already satisfied: requests_toolbelt>=0.8.0 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (0.10.1)
Requirement already satisfied: charset-normalizer<3,>=2 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from requests>=2.21.0->wiotp-sdk) (2.1.1)
Requirement already satisfied: urllib3<1.27,>=1.21.1 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from requests>=2.21.0->wiotp-sdk) (1.26.12)
Requirement already satisfied: idna<4,>=2.5 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from requests>=2.21.0->wiotp-sdk) (3.4)
Requirement already satisfied: certifi>=2017.4.17 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from requests>=2.21.0->wiotp-sdk) (2022.9.24)

C:\Windows\system32>
```

Administrator: Command Prompt

```
Microsoft Windows [Version 10.0.19041.1415]
(c) Microsoft Corporation. All rights reserved.

C:\Windows\system32>pip install wiotp-sdk
Collecting wiotp-sdk
  Cache entry deserialization failed, entry ignored
  Using cached https://files.pythonhosted.org/packages/2a/03/ea8c103718bc57acea7105350dffac51c9143f20c929c240b0f7716225b4/wiotp-sdk-0.11.0.tar.gz
Requirement already satisfied: iso8601>=0.1.12 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (1.1.0)
Requirement already satisfied: pytz>=2018.9 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (2022.6)
Collecting pyyaml>=3.13 (from wiotp-sdk)
  Cache entry deserialization failed, entry ignored
  Downloading https://files.pythonhosted.org/packages/d1/c0/4fe04181b0210ee2647cfbb89ecd10a36eef89f10d8aca6a192c201bbe58/PyYAML-6.0-cp37-cp37m-win_amd64.whl (153kB)
    100% |████████████████████████████████| 153kB 303kB/s
Requirement already satisfied: paho-mqtt>=1.5.0 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (1.6.1)
Requirement already satisfied: requests>=2.21.0 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (2.28.1)
Requirement already satisfied: requests_toolbelt>=0.8.0 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (0.10.1)
Requirement already satisfied: certifi>=2017.4.17 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from requests>=2.21.0->wiotp-sdk) (2022.9.24)
Requirement already satisfied: charset-normalizer<3,>=2 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from requests>=2.21.0->wiotp-sdk) (2.1.1)
Requirement already satisfied: idna<4,>=2.5 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from requests>=2.21.0->wiotp-sdk) (3.4)
Requirement already satisfied: urllib3<1.27,>=1.21.1 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from requests>=2.21.0->wiotp-sdk) (1.26.12)
Installing collected packages: pyyaml, wiotp-sdk
  Running setup.py install for wiotp-sdk ... done
Successfully installed pyyaml-6.0 wiotp-sdk-0.11.0
Cache entry deserialization failed, entry ignored
You are using pip version 10.0.1, however version 22.3.1 is available.
You should consider upgrading via the 'python -m pip install --upgrade pip' command.

C:\Windows\system32>pip install ibmcloudant
Collecting ibmcloudant
  Cache entry deserialization failed, entry ignored
  Using cached https://files.pythonhosted.org/packages/50/49/112b1fe5b312aee89fd96cb25e72998f402a2c80fe06255251a8a2423ebe/ibmcloudant-0.3.0.tar.gz
Collecting ibm_cloud_sdk_core==3.16.0 (from ibmcloudant)
  Cache entry deserialization failed, entry ignored
  Using cached https://files.pythonhosted.org/packages/b1/35/2e6ad7ecb21c5ff42f37ced3aa4e90fac9a1fac2cfdaa10403ca3d653b28/ibm_cloud_sdk_core-3.16.0-py3-none-any.whl
Requirement already satisfied: requests<3.0,>=2.20 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from ibmcloudant) (2.28.1)
Collecting python_dateutil<3.0.0,>=2.5.3 (from ibmcloudant)
  Cache entry deserialization failed, entry ignored
  Using cached https://files.pythonhosted.org/packages/36/7a/87837f39d0296e723bb9b62bbb257d0355c7f6128853c78955f57342a56d/python_dateutil-2.8.2-py2.py3-none-any.whl
Collecting PyJWT<3.0.0,>=2.0.1 (from ibmcloudant)
  Cache entry deserialization failed, entry ignored
  Using cached https://files.pythonhosted.org/packages/40/46/505f0dd53c14096f01922bf93a7abb4e40e29a06f858abbaa791e6954324/PyJWT-2.6.0-py3-none-any.whl
```

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, 1.18.3, 1.18.4, 1.18.5, 1.19.0rc1, 1.19.0rc2, 1.19.0, 1.19.1, 1.19.2, 1.19.3, 1.19.4, 1.19.5, 1.20.0rc1, 1.20.0rc2, 1.20.0, 1.20.1, 1.20.2, 1.20.3, 1.21.0rc1, 1.21.0r
c2, 1.21.0, 1.21.1, 1.21.2, 1.21.3, 1.21.4, 1.21.5, 1.21.6)
No matching distribution found for numpy==1.13.3
You are using pip version 10.0.1, however version 22.3.1 is available.
You should consider upgrading via the 'python -m pip install --upgrade pip' command.


C:\Windows\system32>python -m pip install --upgradepip

Usage:
  C:\Users\LALITHA\AppData\Local\Programs\Python\Python37\python.exe -m pip install [options] <requirement specifier> [package-index-options] ...
  C:\Users\LALITHA\AppData\Local\Programs\Python\Python37\python.exe -m pip install [options] -r <requirements file> [package-index-options] ...
  C:\Users\LALITHA\AppData\Local\Programs\Python\Python37\python.exe -m pip install [options] [-e] <vcs project url> ...
  C:\Users\LALITHA\AppData\Local\Programs\Python\Python37\python.exe -m pip install [options] [-e] <local project path> ...
  C:\Users\LALITHA\AppData\Local\Programs\Python\Python37\python.exe -m pip install [options] <archive url/path> ...

no such option: --upgradepip


C:\Windows\system32>python -m pip install --upgrade pip
Collecting pip
  Using cached https://files.pythonhosted.org/packages/09/bd/2410905c76ee14c62baf69e3f4aa780226c1bbfc9485731ad018e35b0cb5/pip-22.3.1-py3-none-any.whl
Installing collected packages: pip
  Found existing installation: pip 10.0.1
    Uninstalling pip-10.0.1:
      Successfully uninstalled pip-10.0.1
  The script pip3.10.exe is installed in 'C:\Users\LALITHA\AppData\Local\Programs\Python\Python37\Scripts' which is not on PATH.
  Consider adding this directory to PATH or, if you prefer to suppress this warning, use --no-warn-script-location.
Successfully installed pip-22.3.1


C:\Windows\system32>pip install wiotp-sdk
Requirement already satisfied: wiotp-sdk in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (0.11.0)
Requirement already satisfied: iso8601>=0.1.12 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (1.1.0)
Requirement already satisfied: pytz>=2018.9 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (2022.6)
Requirement already satisfied: pyyaml>=3.13 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (6.0)
Requirement already satisfied: paho-mqtt>=1.5.0 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (1.6.1)
Requirement already satisfied: requests>=2.21.0 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (2.28.1)
Requirement already satisfied: requests_toolbelt>=0.8.0 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (0.10.1)
Requirement already satisfied: idna<4,>=2.5 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from requests>=2.21.0->wiotp-sdk) (3.4)
Requirement already satisfied: certifi>=2017.4.17 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from requests>=2.21.0->wiotp-sdk) (2022.
9.24)
Requirement already satisfied: urllib3<1.27,>=1.21.1 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from requests>=2.21.0->wiotp-sdk) (1.
26.12)
Requirement already satisfied: charset-normalizer<3,>=2 in c:\users\lalitha\appdata\local\programs\python\python37\lib\site-packages (from requests>=2.21.0->wiotp-sdk)
(2.1.1)
```