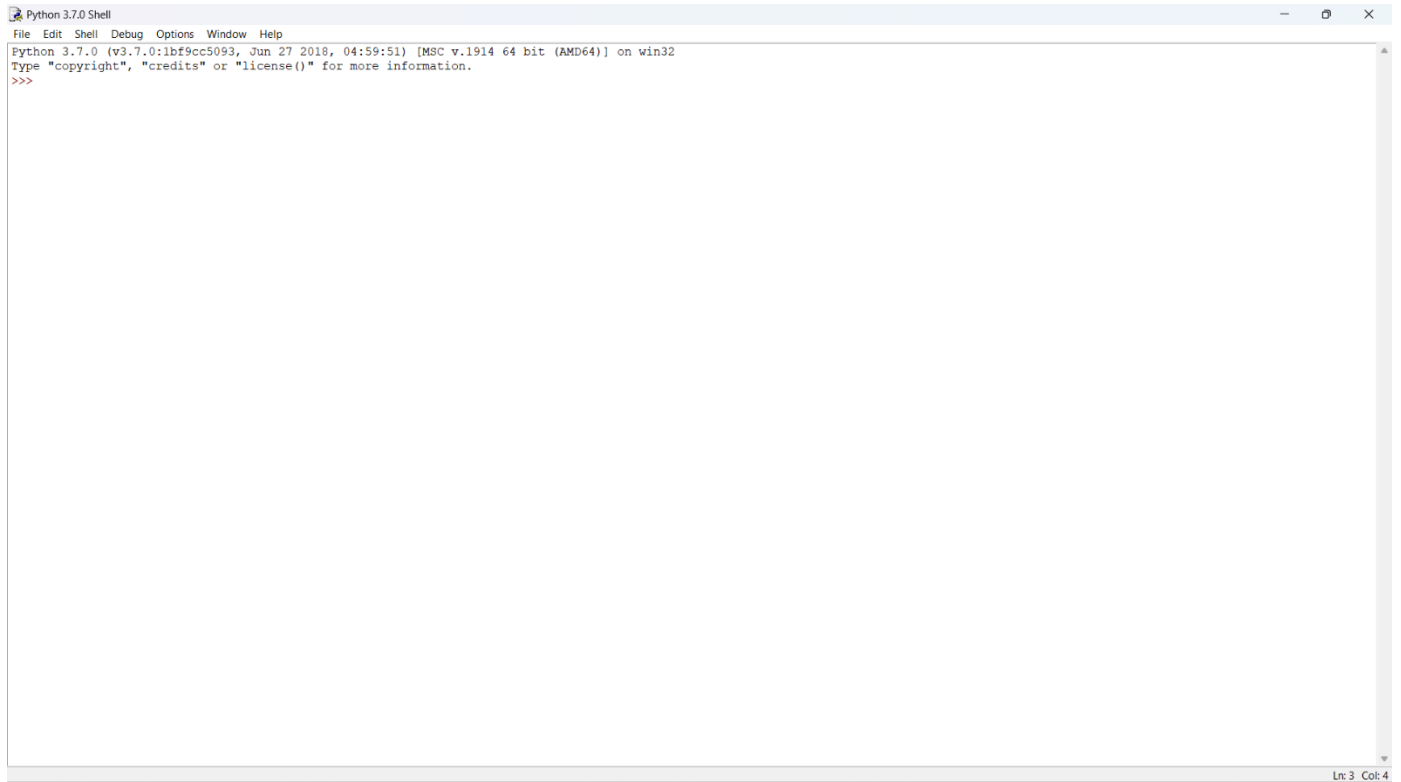


IBM Cloud Service

Date	19 November 2022
Team ID	PNT2022TMID47580
Project Name	Smart Solutions for Railways

Python IDLE :



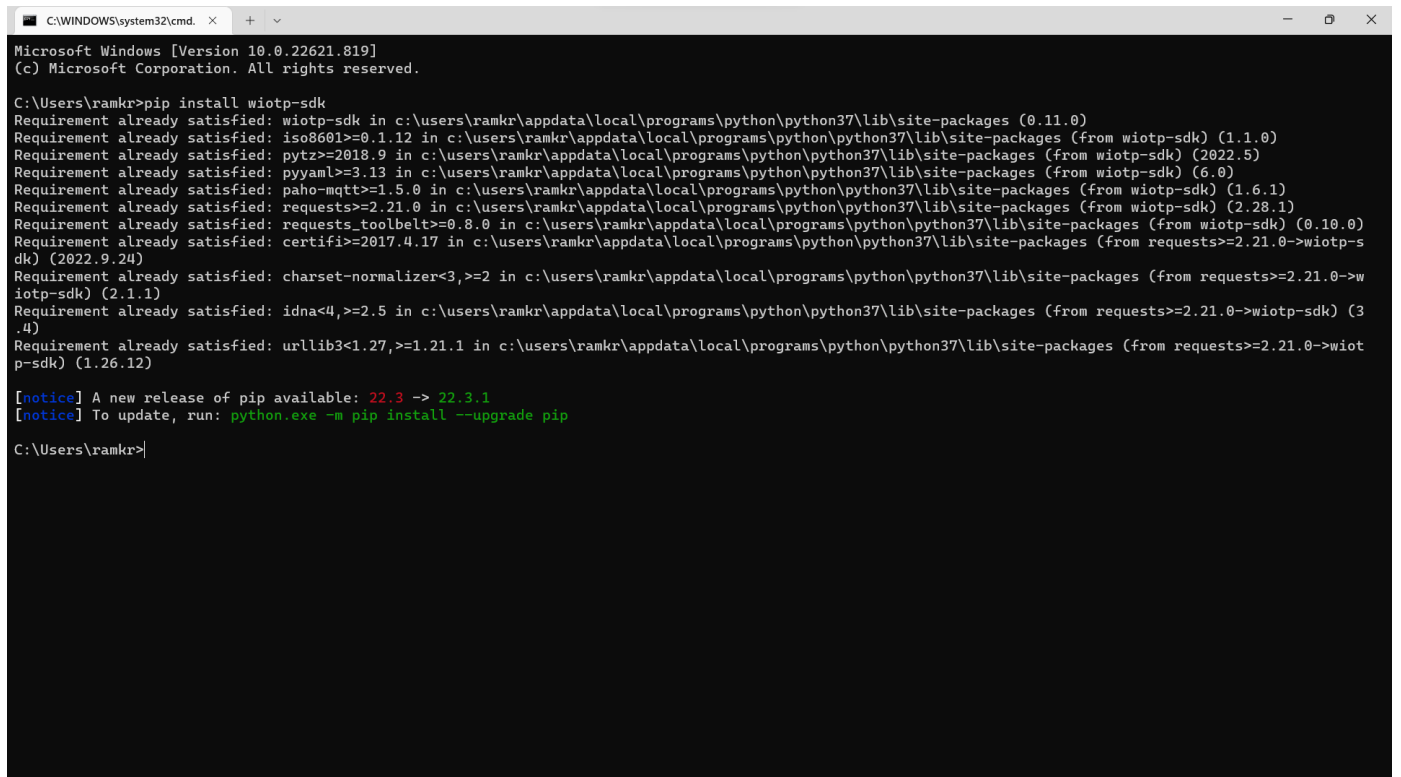
```
Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>

C:\Users\ramkr>pip install wiotp-sdk
Requirement already satisfied: wiotp-sdk in c:\users\ramkr\appdata\local\programs\python\python37\lib\site-packages (0.11.0)
Requirement already satisfied: iso8601>=0.1.12 in c:\users\ramkr\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (1.1.0)
Requirement already satisfied: pytz>=2018.9 in c:\users\ramkr\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (2022.5)
Requirement already satisfied: pyyaml>=3.13 in c:\users\ramkr\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (6.0)
Requirement already satisfied: paho-mqtt>=1.5.0 in c:\users\ramkr\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (1.6.1)
Requirement already satisfied: requests>=2.21.0 in c:\users\ramkr\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\ramkr\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (0.10.0)
Requirement already satisfied: certifi>=2017.4.17 in c:\users\ramkr\appdata\local\programs\python\python37\lib\site-packages (from requests>=2.21.0->wiotp-s
dk) (2022.9.24)
Requirement already satisfied: charset-normalizer<3,>=2 in c:\users\ramkr\appdata\local\programs\python\python37\lib\site-packages (from requests>=2.21.0->w
iotp-sdk) (2.1.1)
Requirement already satisfied: idna<4,>=2.5 in c:\users\ramkr\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\ramkr\appdata\local\programs\python\python37\lib\site-packages (from requests>=2.21.0->wiot
p-sdk) (1.26.12)

[notice] A new release of pip available: 22.3 -> 22.3.1
[notice] To update, run: python.exe -m pip install --upgrade pip

C:\Users\ramkr>
```

wiotp-sdk:



```
C:\WINDOWS\system32\cmd. x + v
Microsoft Windows [Version 10.0.22621.819]
(c) Microsoft Corporation. All rights reserved.

C:\Users\ramkr>pip install wiotp-sdk
Requirement already satisfied: wiotp-sdk in c:\users\ramkr\appdata\local\programs\python\python37\lib\site-packages (0.11.0)
Requirement already satisfied: iso8601>=0.1.12 in c:\users\ramkr\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (1.1.0)
Requirement already satisfied: pytz>=2018.9 in c:\users\ramkr\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (2022.5)
Requirement already satisfied: pyyaml>=3.13 in c:\users\ramkr\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (6.0)
Requirement already satisfied: paho-mqtt>=1.5.0 in c:\users\ramkr\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (1.6.1)
Requirement already satisfied: requests>=2.21.0 in c:\users\ramkr\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\ramkr\appdata\local\programs\python\python37\lib\site-packages (from wiotp-sdk) (0.10.0)
Requirement already satisfied: certifi>=2017.4.17 in c:\users\ramkr\appdata\local\programs\python\python37\lib\site-packages (from requests>=2.21.0->wiotp-s
dk) (2022.9.24)
Requirement already satisfied: charset-normalizer<3,>=2 in c:\users\ramkr\appdata\local\programs\python\python37\lib\site-packages (from requests>=2.21.0->w
iotp-sdk) (2.1.1)
Requirement already satisfied: idna<4,>=2.5 in c:\users\ramkr\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\ramkr\appdata\local\programs\python\python37\lib\site-packages (from requests>=2.21.0->wiot
p-sdk) (1.26.12)

[notice] A new release of pip available: 22.3 -> 22.3.1
[notice] To update, run: python.exe -m pip install --upgrade pip

C:\Users\ramkr>
```

ibmcloudant:

```
C:\WINDOWS\system32\cmd. x + v
Microsoft Windows [Version 10.0.22621.819]
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C:\Users\ramkr>pip install ibmcloudant
Requirement already satisfied: ibmcloudant in c:\users\ramkr\appdata\local\programs\python\python37\lib\site-packages (0.2.1)
Requirement already satisfied: ibm_cloud_sdk_core==3.16.0 in c:\users\ramkr\appdata\local\programs\python\python37\lib\site-packages (from ibmcloudant) (3.16.0)
Requirement already satisfied: requests<3.0,>=2.20 in c:\users\ramkr\appdata\local\programs\python\python37\lib\site-packages (from ibmcloudant) (2.28.1)
Requirement already satisfied: python_dateutil<3.0.0,>=2.5.3 in c:\users\ramkr\appdata\local\programs\python\python37\lib\site-packages (from ibmcloudant) (2.8.2)
Requirement already satisfied: PyJWT<3.0.0,>=2.0.1 in c:\users\ramkr\appdata\local\programs\python\python37\lib\site-packages (from ibmcloudant) (2.6.0)
Requirement already satisfied: urllib3<2.0.0,>=1.26.0 in c:\users\ramkr\appdata\local\programs\python\python37\lib\site-packages (from ibm_cloud_sdk_core==3.16.0->ibmcloudant) (1.26.12)
Requirement already satisfied: six>=1.5 in c:\users\ramkr\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\ramkr\appdata\local\programs\python\python37\lib\site-packages (from requests<3.0,>=2.20->ibmcloudant) (2.1.1)
Requirement already satisfied: certifi>=2017.4.17 in c:\users\ramkr\appdata\local\programs\python\python37\lib\site-packages (from requests<3.0,>=2.20->ibmcloudant) (2022.9.24)
Requirement already satisfied: idna<4,>=2.5 in c:\users\ramkr\appdata\local\programs\python\python37\lib\site-packages (from requests<3.0,>=2.20->ibmcloudant) (3.4)

[notice] A new release of pip available: 22.3 -> 22.3.1
[notice] To update, run: python.exe -m pip install --upgrade pip

C:\Users\ramkr>|
```

Opencv-python:

```
C:\WINDOWS\system32\cmd. x 2x Windows PowerShell x + v
Windows PowerShell
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Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\ramkr> pip install opencv-python
Requirement already satisfied: opencv-python in c:\users\ramkr\appdata\local\programs\python\python37\lib\site-packages (4.6.0.66)
Requirement already satisfied: numpy>=1.14.5 in c:\users\ramkr\appdata\local\programs\python\python37\lib\site-packages (from opencv-python) (1.21.6)

[notice] A new release of pip available: 22.3 -> 22.3.1
[notice] To update, run: python.exe -m pip install --upgrade pip
PS C:\Users\ramkr> |
```

pyzbar:

```
C:\WINDOWS\system32\cmd. x 2x Windows PowerShell x 2x Windows PowerShell x + v
Windows PowerShell
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Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\ramkr> pip install pyzbar
Requirement already satisfied: pyzbar in c:\users\ramkr\appdata\local\programs\python\python37\lib\site-packages (0.1.9)

[notice] A new release of pip available: 22.3 -> 22.3.1
[notice] To update, run: python.exe -m pip install --upgrade pip
PS C:\Users\ramkr> |
```