PREREQUISITES

(IBM cloud service, Software)

Domain	IOT
Team ID	PNT2022TMID51070
Project Name	Industry-Specific Intelligent Fire Management
	System
Maximum Marks	8 Marks

Software:

Python IDE:

Python integrated development environments, or Python IDEs, are software platforms that provide programmers and developers with a comprehensive set of tools for software development in a single product, specifically in the Python programming language.

IDE stands for Integrated Development Environment. It's a coding tool which allows you to write, test, and debug your code in an easier way, as they typically offer code completion or code insight by highlighting, resource management, debugging tools.

Install and setup the Python IDE

```
\times
iDLE Shell 3.10.7
                                                                               File Edit Shell Debug Options Window Help
    Python 3.10.7 (tags/v3.10.7:6cc6bl3, Sep 5 2022, 14:08:36) [MSC v.1933 64 bit (
    AMD64)] on win32
    Type "help", "copyright", "credits" or "license()" for more information.
>>>
```

WATSON IOT PYTHON SDK INSTALLATION:

```
Command Prompt
Microsoft Windows [Version 10.0.19044.2130]
(c) Microsoft Corporation. All rights reserved.
C:\Users\Mathavan B>pip install wiotp-sdk
Collecting wiotp-sdk
 Downloading wiotp-sdk-0.11.0.tar.gz (96 kB)
                                           --- 96.2/96.2 kB 274.6 kB/s eta 0:00:00
 Preparing metadata (setup.py) ... done
Collecting iso8601>=0.1.12
 Downloading iso8601-1.1.0-py3-none-any.whl (9.9 kB)
Collecting pytz>=2018.9
 Downloading pytz-2022.6-py2.py3-none-any.whl (498 kB)
                                   ----- 498.1/498.1 kB 427.9 kB/s eta 0:00:00
Collecting pyyaml>=3.13
Downloading PyYAML-6.0-cp311-cp311-win_amd64.whl (143 kB)
                              ------ 143.2/143.2 kB 772.9 kB/s eta 0:00:00
Collecting paho-mqtt>=1.5.0
Downloading paho-mqtt-1.6.1.tar.gz (99 kB)
                                            -- 99.4/99.4 kB 380.9 kB/s eta 0:00:00
 Preparing metadata (setup.py) ... done
Collecting requests>=2.21.0
 Downloading requests-2.28.1-py3-none-any.whl (62 kB)
Collecting requests_toolbelt>=0.8.0
 Downloading requests_toolbelt-0.10.1-py2.py3-none-any.whl (54 kB)
                                                                     /s eta 0:00:00
Collecting charset-normalizer<3,>=2
 Downloading charset_normalizer-2.1.1-py3-none-any.whl (39 kB)
Collecting idna<4,>=2.5
Downloading idna-3.4-py3-none-any.whl (61 kB)
```

Version of Python



Example output of Python

```
Python 3.7.0 Shell
                                                                         П
                                                                               ×
File Edit Shell Debug Options Window Help
Python 3.7.0 (v3.7.0:lbf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD6 ^
4)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
========= RESTART: D:/IBM Data's/Python Cloud.py ============
                                                    INFO
2022-11-05 12:41:07,624 ibmiotf.device.Client
                                                           Connected successfu
lly: d:88653s:iot device:wokwi us
Published Temperature = 10 C Humidity = 13 % to IBM Watson
Published Temperature = 59 C Humidity = 60 % to IBM Watson
Published Temperature = 59 C Humidity = 37 % to IBM Watson
Published Temperature = 56 C Humidity = 59 % to IBM Watson
Published Temperature = 29 C Humidity = 95 % to IBM Watson
Published Temperature = 44 C Humidity = 25 % to IBM Watson
Published Temperature = 87 C Humidity = 33 % to IBM Watson
Published Temperature = 44 C Humidity = 60 % to IBM Watson
Published Temperature = 18 C Humidity = 49 % to IBM Watson
Published Temperature = 79 C Humidity = 100 % to IBM Watson
Published Temperature = 36 C Humidity = 16 % to IBM Watson
Published Temperature = 69 C Humidity = 34 % to IBM Watson
Published Temperature = 70 C Humidity = 7 % to IBM Watson
Published Temperature = 66 C Humidity = 79 % to IBM Watson
Published Temperature = 74 C Humidity = 33 % to IBM Watson
Published Temperature = 1 C Humidity = 62 % to IBM Watson
Published Temperature = 97 C Humidity = 39 % to IBM Watson
Published Temperature = 85 C Humidity = 24 % to IBM Watson
Published Temperature = 26 C Humidity = 19 % to IBM Watson
Published Temperature = 10 C Humidity = 42 % to IBM Watson
Published Temperature = 50 C Humidity = 3 % to IBM Watson
Published Temperature = 5 C Humidity = 30 % to IBM Watson
Published Temperature = 81 C Humidity = 14 % to IBM Watson
Published Temperature = 0 C Humidity = 23 % to IBM Watson
Published Temperature = 78 C Humidity = 36 % to IBM Watson
Published Temperature = 4 C Humidity = 86 % to IBM Watson
Published Temperature = 12 C Humidity = 38 % to IBM Watson
Published Temperature = 70 C Humidity = 96 % to IBM Watson
Published Temperature = 26 C Humidity = 65 % to IBM Watson
Published Temperature = 59 C Humidity = 88 % to IBM Watson
Published Temperature = 10 C Humidity = 30 % to IBM Watson
```