# **PREREQUISITES**

(Software)

Date	14 NOVEMBER 2022
Team ID	PNT2022TMID33937
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

```
IDLE Shell 3.10.7
                                                                              X
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
                                                                                                                    П
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
                                                                         X
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 ^
Type "copyright", "credits" or "license()" for more information.
      ======= RESTART: D:/IBM Data's/Python Cloud.py =========
2022-11-05 12:41:07,624
                         ibmiotf.device.Client
                                                     INFO 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
```