Project Development Phase
Sprint - 1

Date	29 October 2022
Team ID	PNT2022TMID18041
Project Name	Hazardous Area Monitoring for Industrial Plant powered by IoT
Maximum Marks	2

Data Generation:

Using random function in python, the required sensor data have been generated and published to IBM Watson IoT Platform.

Python Source Code:

```
import wiotp.sdk.device
import time
import random
myConfig = {
"identity": {
"orgId": "sc7zij",
"typeId": "NodeMCU",
"deviceId":"12345"
},
"auth": {
"token": "12345678"
}
}
def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" %cmd.data['command'])
    m=cmd.data['command']
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()
while True:
    temp=random.randint(-20,125)
    hum=random.randint(0,100)
    myData={'d':{'temperature':temp, 'humidity':hum}}
    client.publishEvent(eventId="Data", msgFormat="json", data=myData,
qos=0,onPublish=None)
    print("Published data Successfully: %s", myData)
    client.commandCallback = myCommandCallback
```

```
    time.sleep(2)
client.disconnect()
```

Output: