DEVELOP A PYTHON SCRIPT

TEAM ID	PNT2022TMID14030
PROJECT NAME	Signs with Smart Connectivity for Better Road Safety

STEPS TO DEVELOP A PYTHON SCRIPT:

STEP-1: Install Python IDLE 3.7 from any browser.

STEP-2: Open PYTHON IDLE. Click on File->New file. A new screenopens.

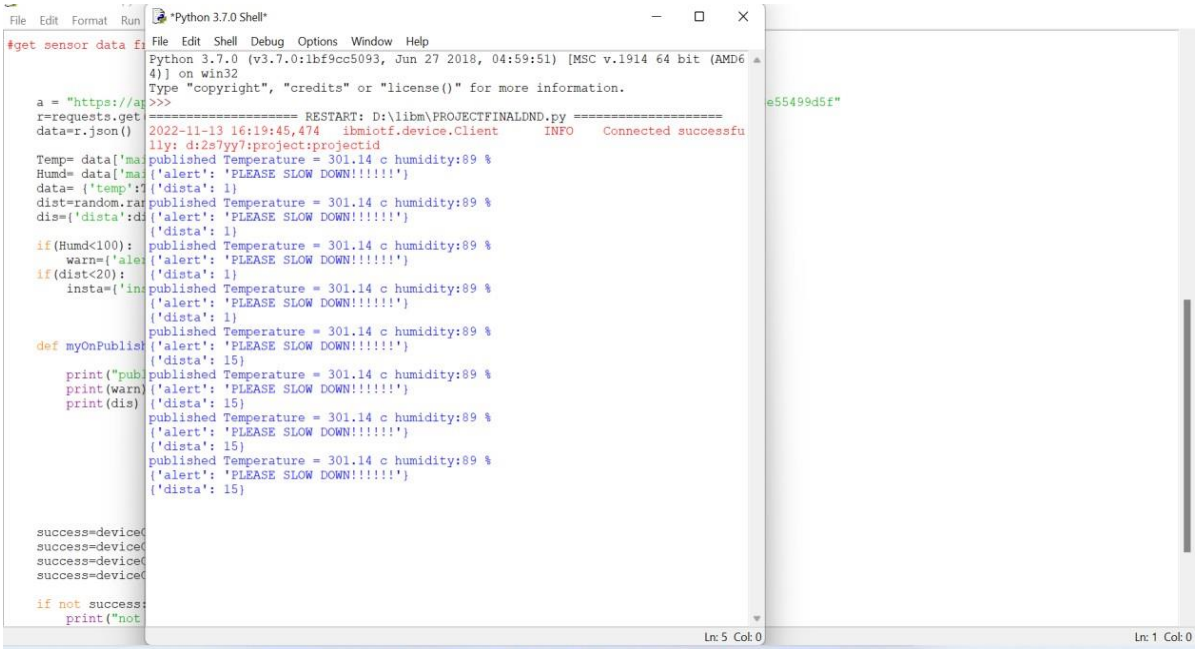
STEP-3: Develop a python program to satisfy the required needs.

STEP-4: Save the file and click Run-> Run Module.

STEP-5: The program gets executed and it reports any error if present, else produces the output.

PYTHON CODE:

```
File  Edit  Format  Run  Options  Window  Help
import requests #importing a library
import json
import ibmiotf.application
import ibmiotf.device
import time
import random
import sys



# watson device details

organization = "2a7yy7"
deviceType = "project"
deviceId = "projectid"
authMethod= "token"
authToken= "projecttoken"

#generate random values for randomo variables (temperature&humidity)


def myCommandCallback(cmd):
    global a
    #print("command recieved:%s" %cmd.data['command'])
    #status=cmd.data['command']
    print("Command recieved:%s" %cmd.data['command'])
    control=cmd.data['command']
    print(control)


try:
        deviceOptions={"org": organization, "type": deviceType,"id": deviceId,"auth-method":authMethod,"auth-token":authToken}
        deviceCli = ibmiotf.device.Client(deviceOptions)
except Exception as e:
        print("caught exception connecting device %s" %str(e))
        sys.exit()

#connect and send a datapoint "temp" with value integer value into the cloud as a type of event for every 10 seconds
```


File Edit Format Run
#get sensor data fr
a = "https://ap
r=requests.get
data=r.json()
Temp= data['ma
Humd= data['ma
data= {'temp':T
dist=random.ra
dis={'dista':di
if(Humd<100):
warn={'ale
if(dist<20):
insta={'in
def myOnPublish
print("pub
print(warn)
print(dis)
success=device
success=device
success=device
success=device
if not success:
print("not
Ln: 1 Col: 0
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.
>>>
e55499d5f"
========== RESTART: D:\libm\PROJECTFINALDND.py ==========
2022-11-13 16:19:45,474 ibmiotf.device.Client INFO Connected successfully: d:2s7yy7:project:projectid
published Temperature = 301.14 c humidity:89 %
{'alert': 'PLEASE SLOW DOWN!!!!!!'}
{'dista': 1}
published Temperature = 301.14 c humidity:89 %
{'alert': 'PLEASE SLOW DOWN!!!!!!'}
{'dista': 1}
published Temperature = 301.14 c humidity:89 %
{'alert': 'PLEASE SLOW DOWN!!!!!!'}
{'dista': 1}
published Temperature = 301.14 c humidity:89 %
{'alert': 'PLEASE SLOW DOWN!!!!!!'}
{'dista': 1}
published Temperature = 301.14 c humidity:89 %
{'alert': 'PLEASE SLOW DOWN!!!!!!'}
{'dista': 15}
published Temperature = 301.14 c humidity:89 %
{'alert': 'PLEASE SLOW DOWN!!!!!!'}
{'dista': 15}
published Temperature = 301.14 c humidity:89 %
{'alert': 'PLEASE SLOW DOWN!!!!!!'}
{'dista': 15}
published Temperature = 301.14 c humidity:89 %
{'alert': 'PLEASE SLOW DOWN!!!!!!'}
{'dista': 15}
Ln: 5 Col: 0