PYTHON SCRIPT

To deployment of IOT platform is also initiated by the python interpreter the IOT platform to connect with devices. Few packages need to be installed to work in python interpreter to traverse between simulator and NODE-RED many other services

PYTHON CODE FOR NODE-RED AND SIMULATOR

The below python code communicates between Node-Red Services, Simulator.

CODE:

```
#IBM Watson IOT Platform
#pip install wiotp-sdk
import wiotp.sdk.device
import time import random
myConfig = {
    "identity": {
        "orgId": "6fkjbm",
        "typeId": "iotdevice1",
        "deviceId":"qwerty123"
    },
    "auth": {
        "token": "johnyjohnyyespapa"
    }
}

def myCommandCallback(cmd):
```

```
print("Message received from IBM IoT Platform: %s" % cmd.data['command']) m=cmd.data['command'] if(m=="Motor-ON"):
    print("**********Motor is Turned ON**********")
else:
    print("**********Motor is Turned OFF**********") client =
wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect() while True:
    temp=random.randint(-20,125)
    hum=random.randint(0,100)
    myData={'temperature':temp, 'humidity':hum}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None) print("Published data
    Successfully: %s", myData)
    client.commandCallback = myCommandCallback
    time.sleep(2)
client.disconnect()
```

IBM TEXT TO SPEECH

```
from ibm_watson import TextToSpeechV1
from ibm_cloud_sdk_core.authenticators import IAMAuthenticator
authenticator = IAMAuthenticator('M_u6yEvEGJylj_ysbL_pG0ZOKuRCQW1LgXUtv_IcBPCR') text_to_speech =
TextToSpeechV1(
authenticator=authenticator
) text_to_speech.set_service_url('https://api.au-syd.text-tospeech.watson.cloud.ibm.com/instances/23724eb6-a096-4a3a-
```

```
b914da0e442c1c5f') with open('hello_world.wav', 'wb') as
audio_file:
    audio_file.write(
        text_to_speech.synthesize(
            'Alert',
            voice='en-US_AllisonV3Voice',
            accept='audio/wav'
        ).get_result().content)
```

OUTPUT: