SOFTWARE

Date	07 NOVEMBER 2022
Team ID	PNT2022TMID42281
Project Name	Project – SMART SOLUTIONS FOR RAILWAYS

PROCEDURE:

Srep1: Install python version 3.9.6
Step2: Import wiotp in python
Step3:Type the python script for GPS
Step4: Run the program

PYTHON SCRIPT FOR GPS:

```
import wiotp.sdk.device
import time
import random
myConfig = {
        "identity": {
                "orgId": "dks66l",
                "typeId": "Sudha",
                "deviceId":"45"
        },
        "auth": {
                "token": "sudha2002@"
        }
}

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()

def pub (data):
        client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
        print ("Published data Successfully: %s", myData)

while True:
        myData={'name': 'Train1', 'lat': 17.6387448, 'lon': 78.4754336}
        pub (myData)
        time.sleep (3)
        #myData={'name': 'Train2', 'lat': 17.6387448, 'lon': 78.4754336)
        #pub (myData)
        #time.sleep (3)
        myData={'name': 'Train1', 'lat': 17.6341908, 'lon': 78.4744722}
        pub(myData)
        time.sleep(3)
        myData={'name': 'Train1', 'lat': 17.6340889, 'lon': 78.4745052}
        pub (myData)
        time.sleep (3)
        myData={'name': 'Train1', 'lat': 17.6248626, 'lon': 78.4720259}
        pub (myData)
        time.sleep (3)
        myData={'name': 'Train1', 'lat': 17.6188577, 'lon': 78.4698726}
        pub (myData)
        time.sleep (3)
        myData={'name': 'Train1', 'lat': 17.6132382, 'lon': 78.4707318}
        pub (myData)
        time.sleep (3)
        client.commandCallback = myCommandCallback
client.disconnect ()
```

GPS OUTPUT: