SPRINT 4

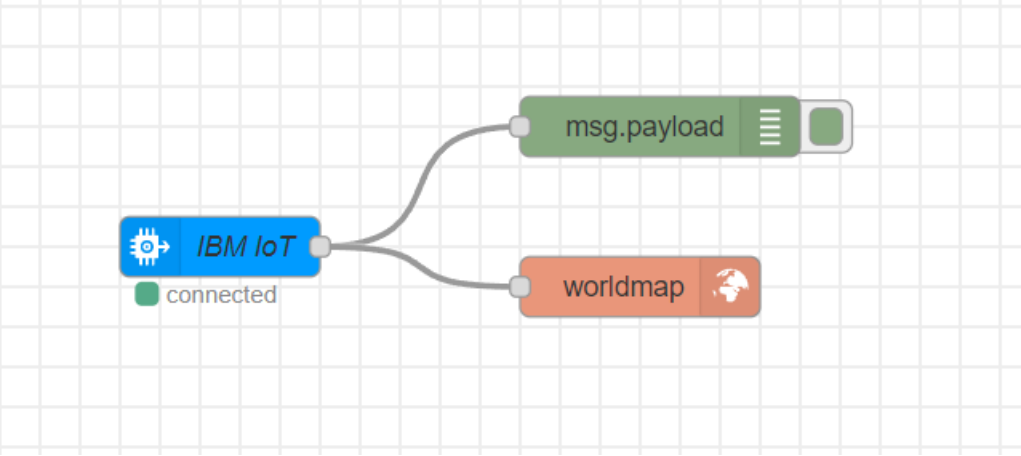
DATE	-	19 NOVEMBER 2022
TEAM ID	-	PNT2022TMID52824
PROJECT NAME	-	SMART SOLUTION FOR RAILWAYS

PROCEDURE:

Step1: Develop a node red application for GPS.

Step2 : Develop a python code for GPS.

NODE RED FLOW:



PYTHON CODE FOR GPS:

```
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "gagtey",
        "typeId": "GPS",
        "deviceId": "12345"
    },
    "auth" : {
        "token": "EB-*2EQcMJSiWFhbs!"
    }
}

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)
    print("Published data Successfully: %s", myData)
```

```
while True:
    myData = {'name':'Train1','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()
```