SPRINT – 3

PROCEDURE:

Step 1: Develop node red web application to track the train location.

Step 2: Install the required node node-red-contrib-web-worldmap.

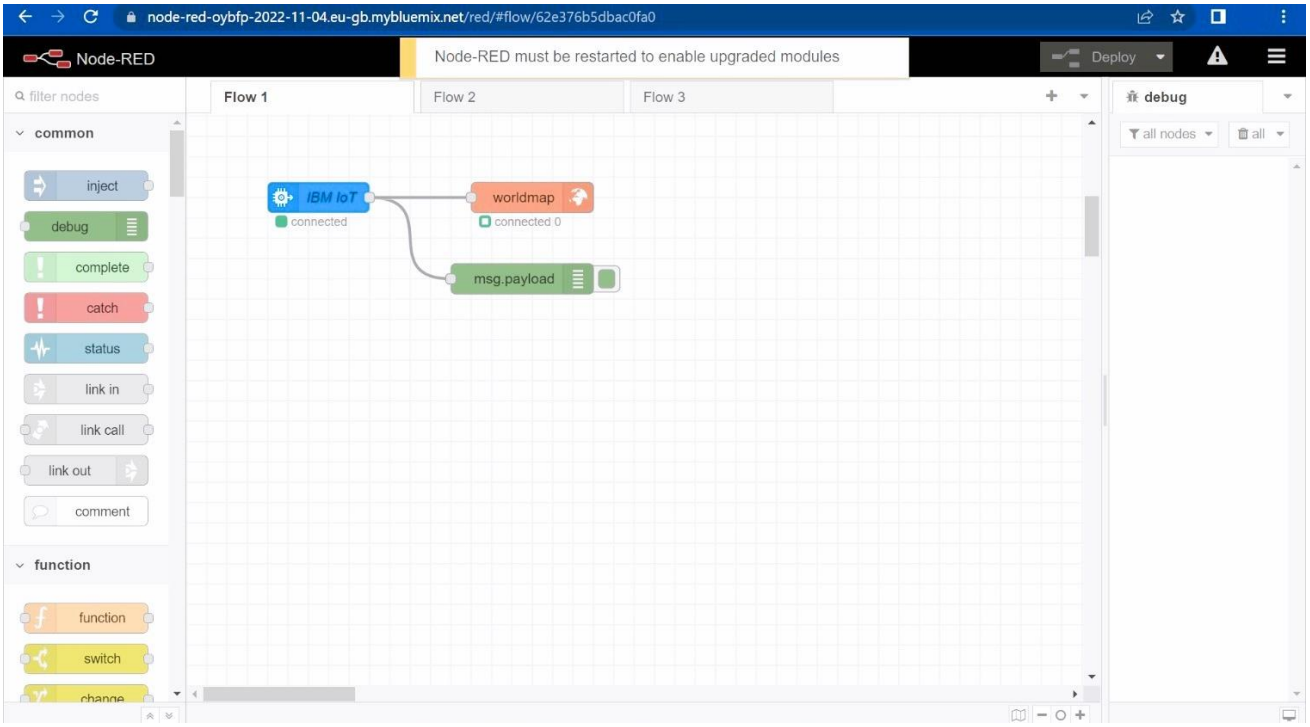
Step 3: Connect the node flow.

Step 4: Run the python code.

Step 5: Click the shortcut CTRL+SHIFT+M to jump to the default map (worldmap).

Step 4: View the map.

NODE RED FLOW:

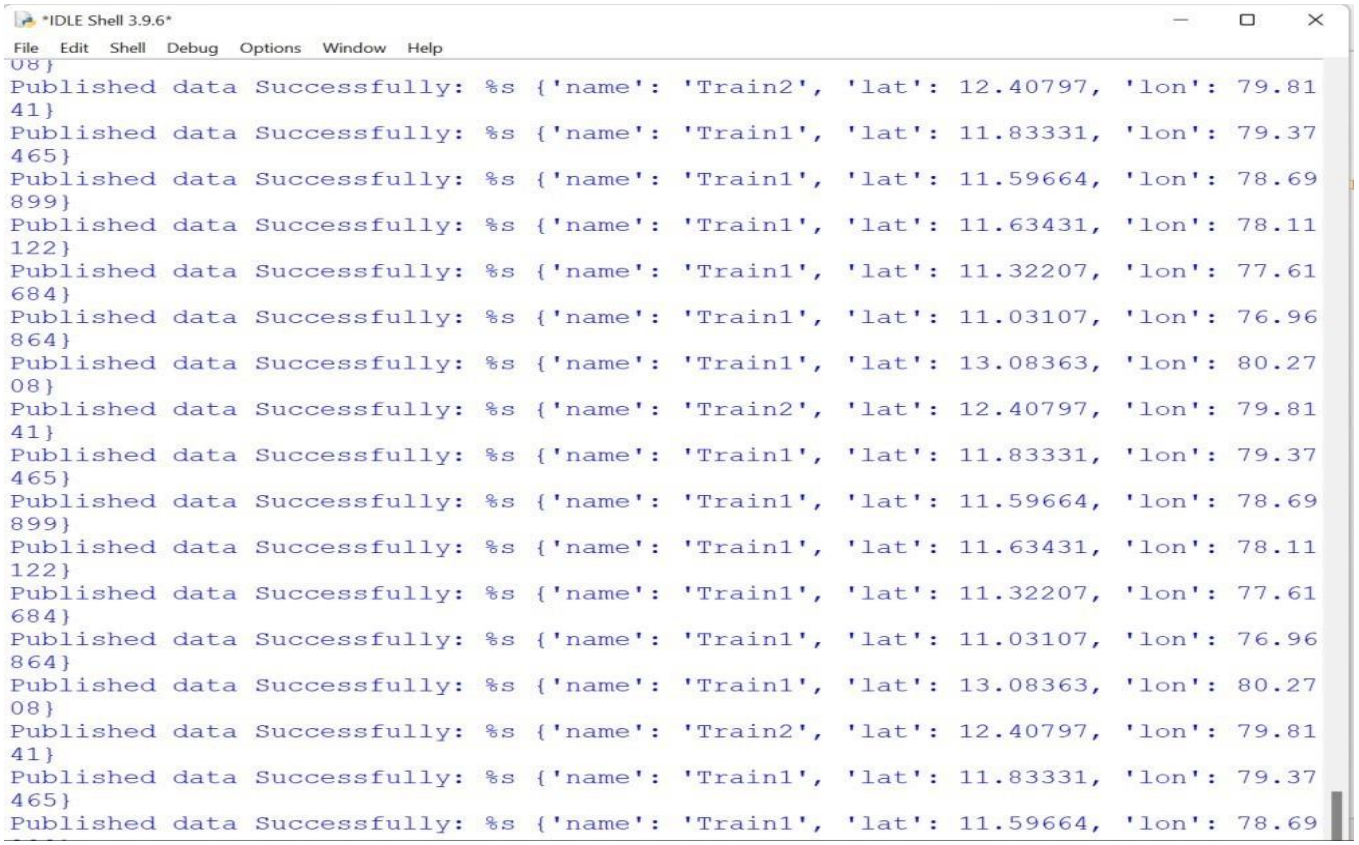


PYTHON CODE FOR GPS:

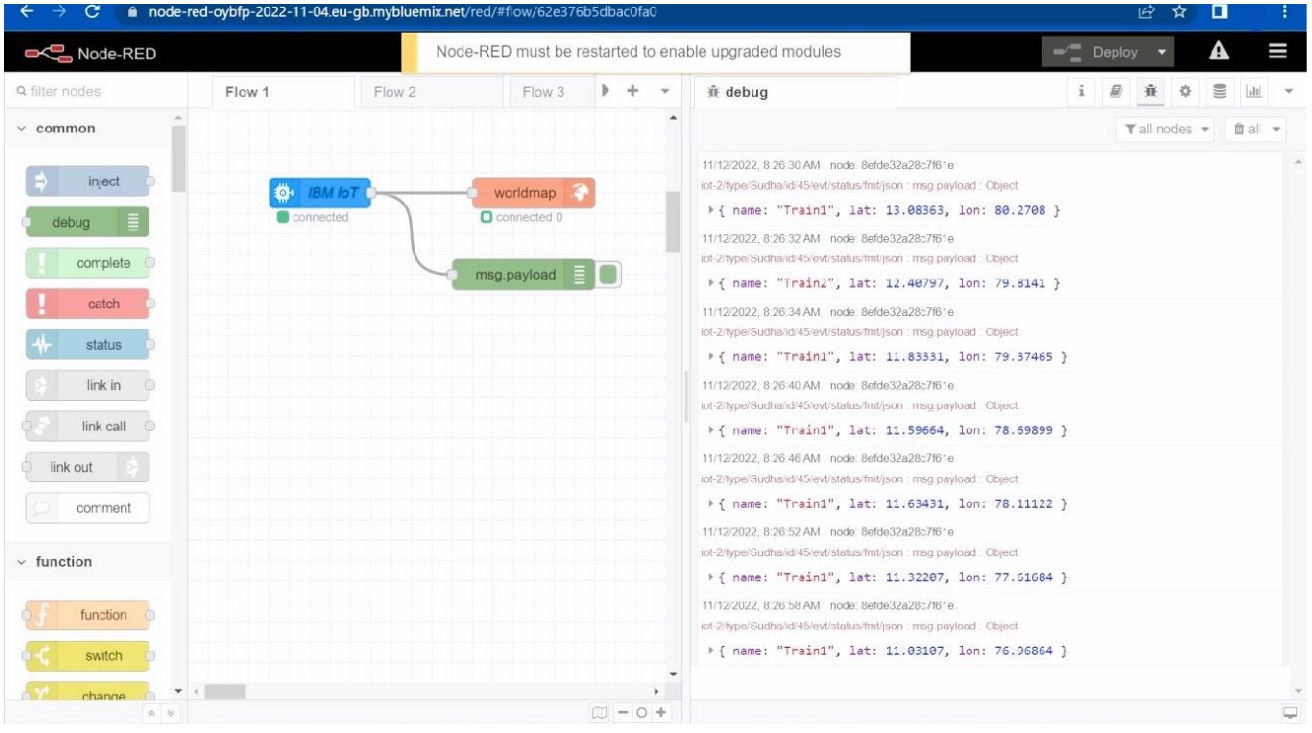
```
import wiotp.sdk.device
import time
import random
myconfig = {
        “identity”: {
                “orgID”: “dks661”
                “typeID”: “Sundar”
                “deviceID”: “45”
        },
        “auth”: {
                “token”: “sundar@2001”
        }
}
def myCommandCallback(cmd):
        print (“Message has been received from IoT platform: %s
        %cmd.data[‘command’])
        m = cmd.data[‘command’]
client = wiotp.sdk.DeviceClient(config = myConfig, logHandlers = None)
client.connect()
def pub (data):
        client.publishEvent (eventId = “status”, msgFormat = “json”, data = myData,
        qos = 0, onPublish = None)
        client.connect()
while True:
        myData = {'name': 'Train1', 'lat': 13.08363, 'lon': 80.27080}
```

```
        time.sleep(2)
        myData = {'name': 'Train2', 'lat': 12.40797, 'lon': 79.81410}
        pub(myData)
        time.sleep(2)
        myData = {'name': 'Train1', 'lat': 11.83331, 'lon': 79.37465}
        pub(myData)
        time.sleep(6)
        myData = {'name': 'Train1', 'lat': 11.59664, 'lon': 78.69899}
        pub(myData)
        time.sleep(6)
        myData = {'name': 'Train1', 'lat': 11.63431, 'lon': 78.11122}
        pub(myData)
        time.sleep(6)
        myData = {'name': 'Train1', 'lat': 11.32207, 'lon': 77.61684}
        pub(myData)
        time.sleep(6)
        myData = {'name': 'Train1', 'lat': 11.03107, 'lon': 76.96864}
        pub(myData)
        time.sleep(6)
        client.commandCallback = myCommandCallback
client.disconnect()
```

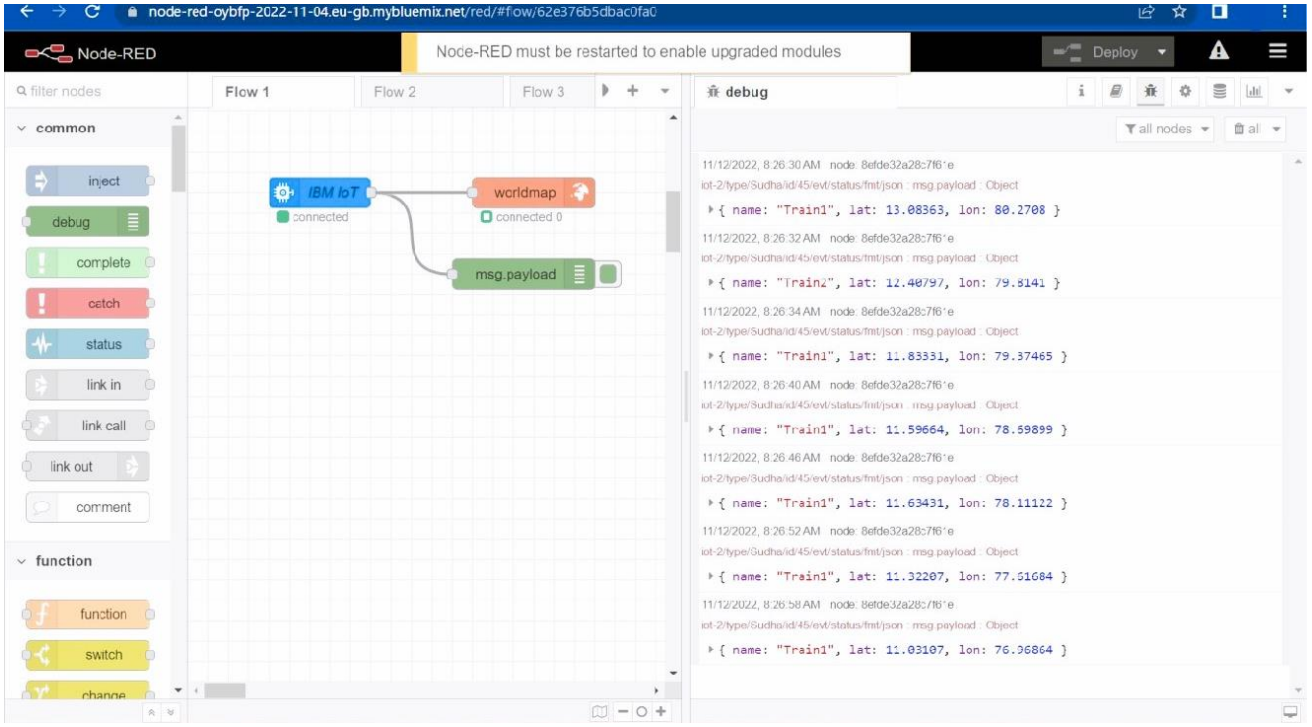
NODE RED FLOW:



NODE RED OUTPUT:



TRAIN TRACKING:



Topic:

Smart Solution for Railways

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