PYTHON CODE FOR QR SCANNER

```python
import cv2

import numpy as np

import time

import pyzbar.pyzbar as pyzbar

from ibmcloudant.cloudant_v1 import CloudantV1

from ibmcloudant import CouchDbSessionAuthenticator

from ibm_cloud_sdk_core.authenticators import BasicAuthenticator


authenticator = BasicAuthenticator('apikey-267fe83f32ec443b804f3c76d688d2e3',
'b1456cbe3c712c2d555623fe092c074478521354')

service = CloudantV1(authenticator=authenticator)


service.set_service_url('https://4f470103-dd2c-4f50-94e8-3439395a7935-bluemix.cloudant.com')


cap= cv2.VideoCapture(0)

font = cv2.FONT_HERSHEY_PLAIN


while True:
        _, frame = cap.read()
        decodedObjects = pyzbar.decode (frame)
        for obj in decodedObjects:
                #print ("Data", obj.data)
                a=obj.data.decode('UTF-8')
                cv2.putText(frame, "Ticket", (50, 50), font, 2,     (255, 0, 0), 3)

                #print (a)
```

```python
            try:
                response = service.get_document(
                    db='booking',
                    doc_id = a
                ).get_result()
                print (response)
                time.sleep(5)
            except Exception as e:
                print ("Not a Valid Ticket")
                time.sleep(5)


        cv2.imshow("Frame",frame)
        if cv2.waitKey(1) & 0xFF ==ord('q'):
            break
cap.release()
cv2.destroyAllWindows()
client.disconnect()
```

PYTHON CODE FOR TRAIN LOCATION

```python
import wiotp.sdk.device

import time

import random

myConfig = {

        "identity": {

                "orgId": "ojhlri",

                "typeId": "GPS",

                "deviceId":"12345"

        },

        "auth": {

                "token": "12345678"

        }

}


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}
```

```python
    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 ()
```