

Name :- Asodariya Parth K.

Roll No :- 33

Sem :- 9th

Subject :- IOT

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MQTT-SUBSCRIBER.py:

```
import paho.mqtt.client as mqtt
import time
import sqlite3

connection = sqlite3.connect('sensor.db')

def on_connect(client, userdata, flags, resultCode):
    print('Connected with client')
    client.subscribe('mscit/testing1')
    table_cursor = connection.cursor()
    table_cursor.execute("""
        CREATE TABLE IF NOT EXISTS PubilshMsgs(
            Msg_ID INTEGER PRIMARY KEY AUTOINCREMENT,
            Payload TEXT,
            LOGTIMESTAMP TIMESTAMP DEFAULT CURRENT_TIMESTAMP
        )
    """)

def on_message(client, userdata, message):
    payload_data = message.payload.decode('UTF-8')
    record_cursor = connection.cursor()
    record_cursor.execute("INSERT INTO PubilshMsgs(Payload)
VALUES('"+str(payload_data)+"');")
    connection.commit()
    print(payload_data)
    rows_cursor = connection.cursor()
    rows_cursor.execute("SELECT * FROM PubilshMsgs ORDER BY Msg_ID ASC LIMIT
10")
    records = rows_cursor.fetchall()

    for rows_ in records:
        print(rows_)
client = mqtt.Client()
client.on_connect = on_connect
client.on_message = on_message
client.connect('broker.emqx.io', 1883, 60);
client.loop_forever()
```

```
import paho.mqtt.client as mqtt
import time
def on_connect(client, userdata, flags, resultCode):
    print('Client is connected')

client = mqtt.Client()
client.on_connect = on_connect
client.connect('broker.emqx.io', 1883, 60);

while True:
    msg = "Welcome to VNSGU, Roll no. 33 Parth Asodariya"
    payload = str(msg)
    print('send data to client successfully')
    client.publish('mcsit/testing1', payload= payload, qos = 0, retain=False)
    time.sleep(1)

client.loop_forever()
```

```
def on_connect(client, userdata, flags, resultCode):
    print('Connected with client')
    client.subscribe('mcsit/testing')
    table_cursor = connection.cursor()
    table_cursor.execute("""
        CREATE TABLE IF NOT EXISTS PubilishMsgs(
            Msg ID INTEGER PRIMARY KEY AUTOINCREMENT,
            Payload TEXT,
            LOGTIMESTAMP TIMESTAMP DEFAULT CURRENT_TIMESTAMP
        )
    """)

Shell
(4, 'Welcome to VNSGU Roll No : 18', '2021-01-07 17:57:34')
(5, 'Welcome to VNSGU Roll No : 18 Viraj Jhaveri', '2021-01-07 17:57:35')
(6, 'Welcome to VNSGU Roll No : 18', '2021-01-07 17:57:37')
(7, 'Welcome to VNSGU Roll No : 18 Viraj Jhaveri', '2021-01-07 17:57:38')
(8, 'Welcome to VNSGU Roll no. 33 Parth Asodariya', '2021-01-07 17:58:18')
(9, 'Welcome to VNSGU Roll no. 33 Parth Asodariya', '2021-01-07 17:58:19')
(10, 'Welcome to VNSGU Roll No : 18', '2021-01-07 17:58:20')
Welcome to VNSGU Roll no:40
(1, 'Welcome to VNSGU Roll No : 18', '2021-01-07 17:57:01')
(2, 'Welcome to VNSGU Roll No : 18', '2021-01-07 17:57:31')
(3, 'Welcome to VNSGU Roll No : 18 Viraj Jhaveri', '2021-01-07 17:57:32')
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```

```
pi@raspberrypi:~/Documents/Python Practise $ python3 mqtt-publisher.py
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