

```
1  from mqttclient import MQTTClient
2  import network
3  import math
4
5  # Important: change the line below to a unique string.
6  session = "rimuru"
7  BROKER = "iot.eclipse.org"
8
9  # check wifi connection
10 wlan = network.WLAN(network.STA_IF)
11 wlan.active(True)
12 ip = wlan.ifconfig()[0]
13 if ip == '0.0.0.0':
14     print("no wifi connection")
15     # code to handle the problem ...
16 else:
17     print("connected to WiFi at IP", ip)
18
19 # connect to MQTT broker
20 print("Connecting to MQTT broker", BROKER, "...", end="")
21 mqtt = MQTTClient(BROKER)
22 print("Connected!")
23
24 # send data
25 # In this sample, we send "fake" data. Replace this code to send useful data,
26 # e.g. measurement results.
27 for t in range(100):
28     s = math.sin(t/10)
29     # add additional values as required by application
30     topic = "{} /data".format(session)
31     data = "{} , {}".format(t, s)
32     print("send topic='{}' data='{}'".format(topic, data))
33     mqtt.publish(topic, data)
34
35 # do the plotting (on host)
36 print("tell host to do the plotting ...")
37 mqtt.publish("{} /plot".format(session), "create the plot")
38
39 # free up resources
40 # alternatively reset the microphyton board before executing this program again
41 mqtt.disconnect()
```