**CLIENT PROGRAM:**

import time

import paho.mqtt.client as mqtt

import RPi.GPIO as GPIO

GPIO.setwarnings(False)

GPIO.setmode(GPIO.BOARD)

GPIO.setup(36, GPIO.OUT)

GPIO.setup(38, GPIO.OUT)

GPIO.setup(40, GPIO.OUT)

# The callback for when the client receives a CONNACK response from the server.

def on\_connect(client, userdata, flags, rc):

#print("Connected with result code "+str(rc))

client.subscribe("ETS/IOTKIT/RELAY") # Subscribe Message

print("SUBSCRIBED...")

print("Enter Command")

# The callback for when a PUBLISH message is received from the server.

def on\_message(client, userdata, msg):

print(msg.topic+" "+str(msg.payload))

x=msg.payload.decode('utf-8')

print(x)

if x == 'ON1': # Payload for Relay 1 ON

GPIO.output(36, 1)

print("Relay1 ON")

if x == 'OFF1':

GPIO.output(36, 0)

print("Relay1 OFF")

if x == 'ON2':

GPIO.output(38, 1)

print("Relay2 OFF")

if x == 'OFF2':

GPIO.output(38, 0)

print("Relay2 OFF")

if x == 'ON3':

GPIO.output(40, 1)

print("Relay3 OFF")

if x == 'OFF3':

GPIO.output(40, 0)

print("Relay3 OFF")

# Create an MQTT client and attach our routines to it.

client = mqtt.Client()

client.on\_connect = on\_connect

client.on\_message = on\_message

client.connect("test.mosquitto.org", 1883, 60)

client.loop\_forever()