Twitter Controlled Christmas Lights Instruction Manual

You will need:

1. Christmas lights
   (Specifically the "Connectable starter kit LED multi-function light set" bought from Office Works was used)
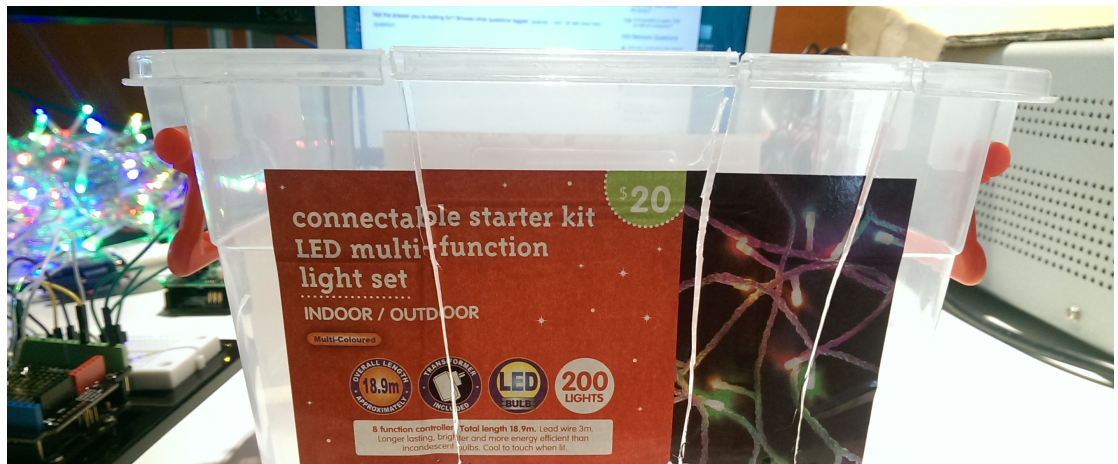

Figure 1: Connectable starter kit LED multi-function light set box.

2. Arduino Uno with inbuilt Ethernet Shield
3. Twitter account
4. MQTT

Instructions:

Step 1.   Attach the Christmas lights to the Arduino with the help of *figure 2 below.*
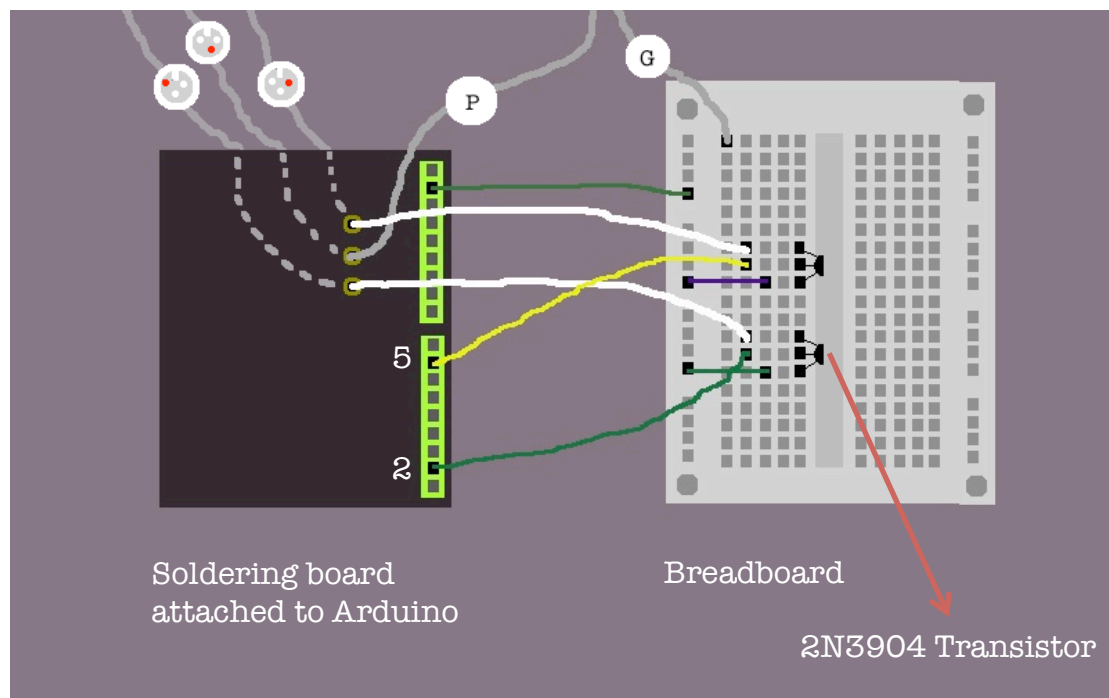

Figure 2: Layout of hardware.

Step 2.   Open the ChristmasLights.py python script and add your own twitter   account information as asked of in lines 8-12.

```
8    # ----- INSERT YOUR ACCOUNT INFORMATION BELOW --------------
9    CONSUMER_KEY = "INSERT YOUR CONSUMER KEY HERE"
10   CONSUMER_SECRET = "INSERT YOUR CONSUMER SECRET KEY HERE"
11   ACCESS_KEY= "INSERT YOUR ACCESS KEY HERE"
12   ACCESS_SECRET = "INSERT YOUR ACCESS SECRET KEY HERE"
```

Figure 3: Lines 8-12 of python script ChristmasLights.py.

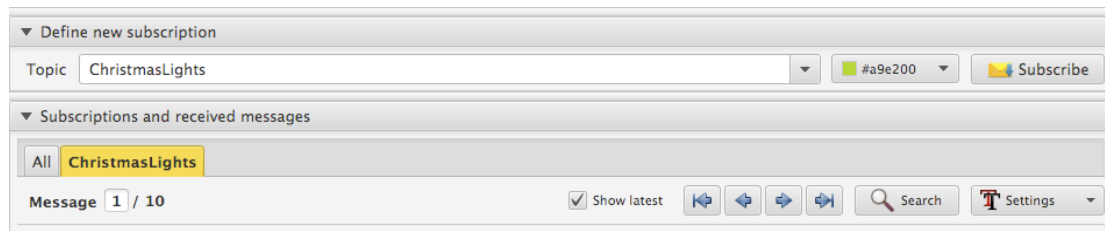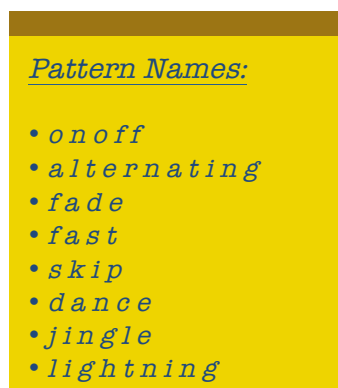**Step 3.**   Open MQTT and subscribe to topic "ChristmasLights"
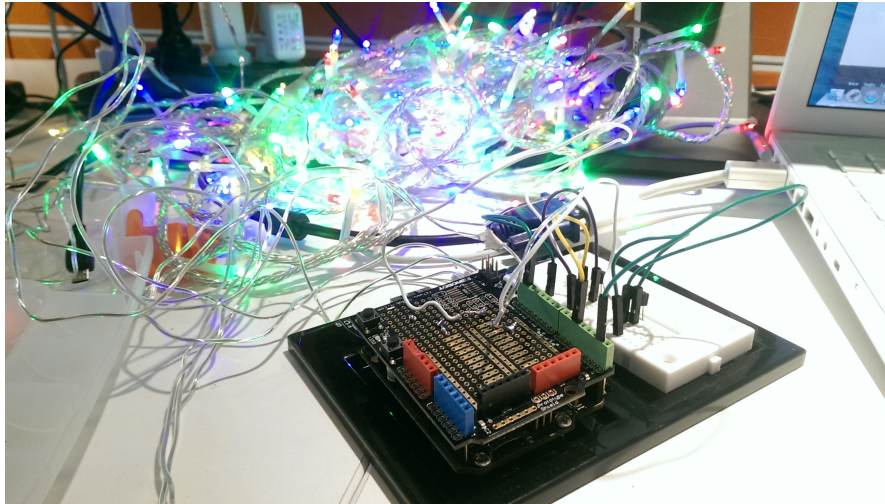

Figure 4: Snapshot of MQTT.

Step 4.   Run the python script.

Step 5.   Send a tweet mentioning twitter account followed by one of the light pattern names listed below.

       E.g   *@YourTwitterAccount jingle*

Pattern Names:

- *onoff*
- *alternating*
- *fade*
- *fast*
- *skip*
- *dance*
- *jingle*
- *lightning*

Step 6.   Enjoy the amazing light display!

Step 7.   What now? Edit the TwitterXmasLights.ino to make your own light patterns!