

Sri Lanka Institute of Information Technology



**Lab Submission
<Worksheet No.9>**

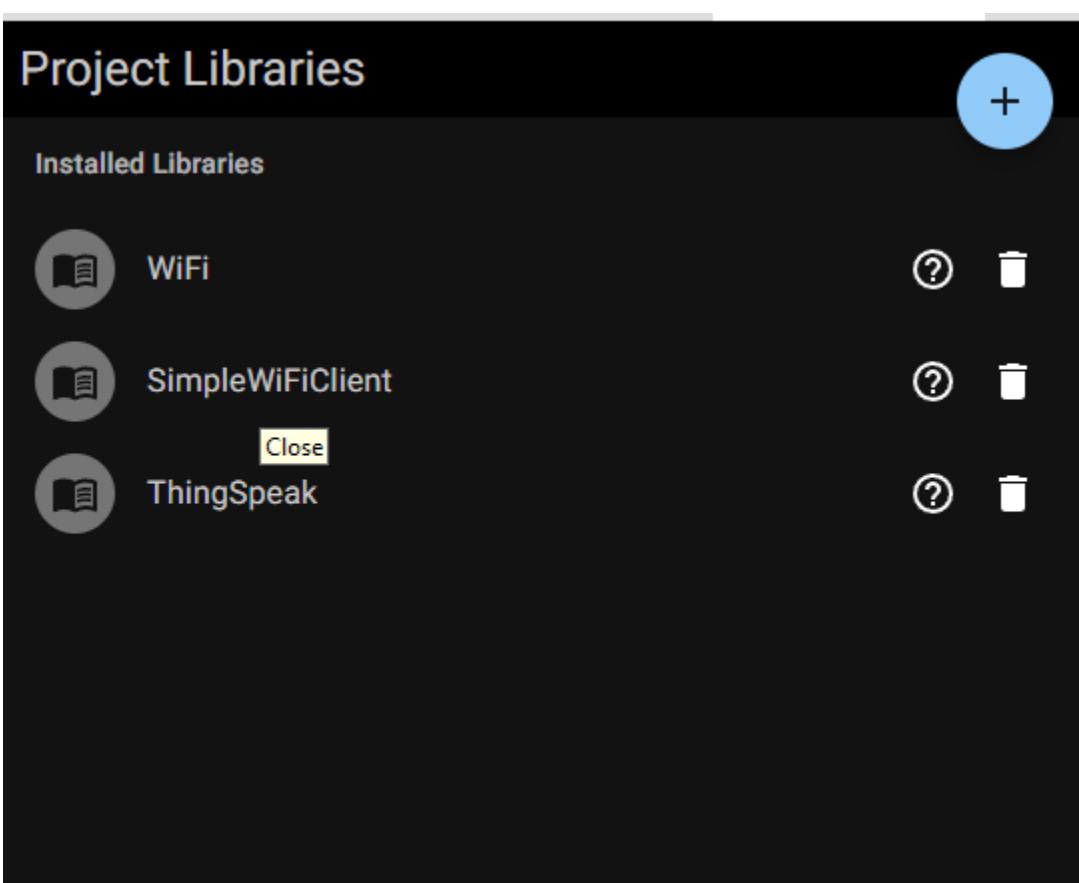
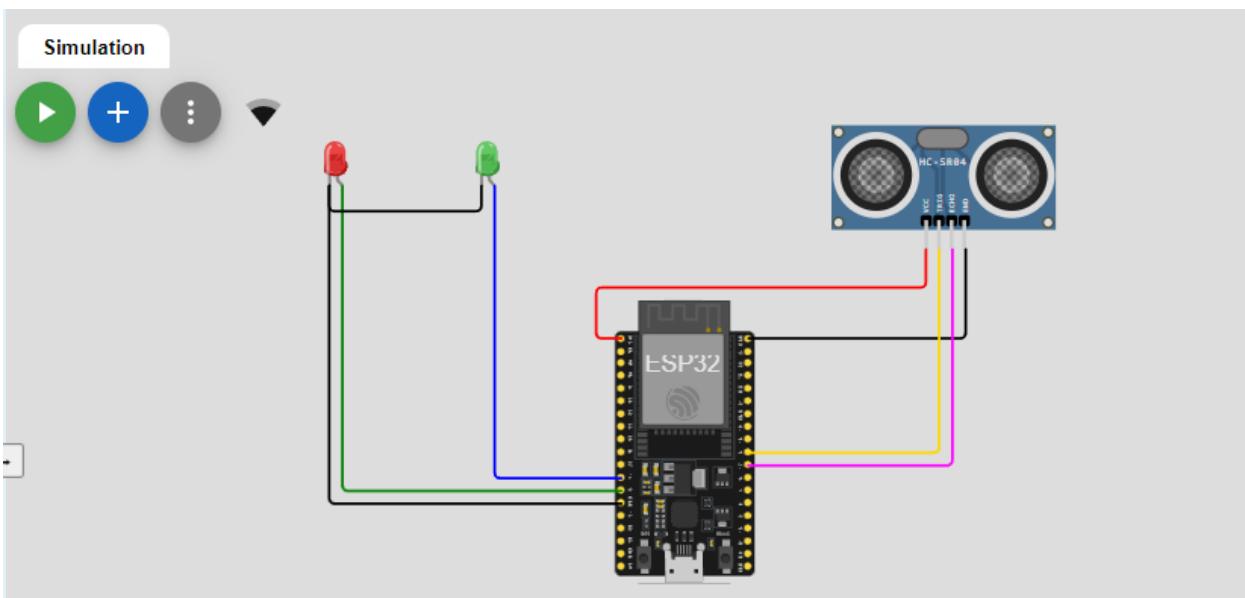
<IT24102555>

<Weerathunga B.A>

Fundamentals of Computing | IT1140

B.Sc. (Hons) in Information Technology

1.



```
sketch.ino • diagram.json • libraries.txt • Library Manager ▾
  1 #include <WiFi.h>
  2 #include <WiFiClient.h>
  3 #include "ThingSpeak.h"
  4 #define Low_LED_Pin 12
  5 #define High_LED_Pin 14
  6 #define PIN_TRIGGER 5
  7 #define PIN_ECHO 17
  8 const char* WIFI_NAME = "Wokwi-GUEST";
  9 const char* WIFI_PASSWORD = "";
10 const int myChannelNumber = 2692602 ;
11 const char* myApiKey = "GZUYT43YN36AXMQA";
12 const char* server = "api.thingspeak.com";
13 WiFiClient client;
14 void setup() {
15   Serial.begin(115200);
16   pinMode(Low_LED_Pin, OUTPUT);
17   pinMode(High_LED_Pin, OUTPUT);
18   pinMode(PIN_TRIGGER, OUTPUT);
19   pinMode(PIN_ECHO, INPUT);
20   WiFi.begin(WIFI_NAME, WIFI_PASSWORD);
21   ThingSpeak.begin(client);
22 }
23 void loop() {
24   digitalWrite(PIN_TRIGGER, HIGH);
25   delayMicroseconds(10);
26   digitalWrite(PIN_TRIGGER, LOW);
27   int duration = pulseIn(PIN_ECHO, HIGH);
28   int distance = duration / 58;
29   Serial.print("Distance in CM: ");
```

```
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20 WiFi.begin(WIFI_NAME, WIFI_PASSWORD);
21 ThingSpeak.begin(client);
22 }
23 void loop() {
24 digitalWrite(PIN_TRIGGER, HIGH);
25 delayMicroseconds(10);
26 digitalWrite(PIN_TRIGGER, LOW);
27 int duration = pulseIn(PIN_ECHO, HIGH);
28 int distance = duration / 58;
29 Serial.print("Distance in CM: ");
30 Serial.println(distance);
31 ThingSpeak.setField(1,distance);
32 ThingSpeak.writeFields(myChannelNumber,myApiKey);
33 if (distance < 20) {
34 digitalWrite(High_LED_Pin, HIGH);
35 digitalWrite(Low_LED_Pin, LOW);
36 }
37 else if (distance > 300){
38 digitalWrite(Low_LED_Pin, HIGH);
39 digitalWrite(High_LED_Pin, LOW);
40 }
41 else{
42 digitalWrite(High_LED_Pin, LOW);
43 digitalWrite(Low_LED_Pin, LOW);
44 }
45 delay(1000);
46 }
```

labog

Channel ID: **2692602**

Author: [mwa0000035495625](#)

Access: Private

[Private View](#)

[Public View](#)

[Channel Settings](#)

[Sharing](#)

[API Keys](#)

Write API Key

Key

GZUYT43YN36AXMQA

[Generate New Write API Key](#)

