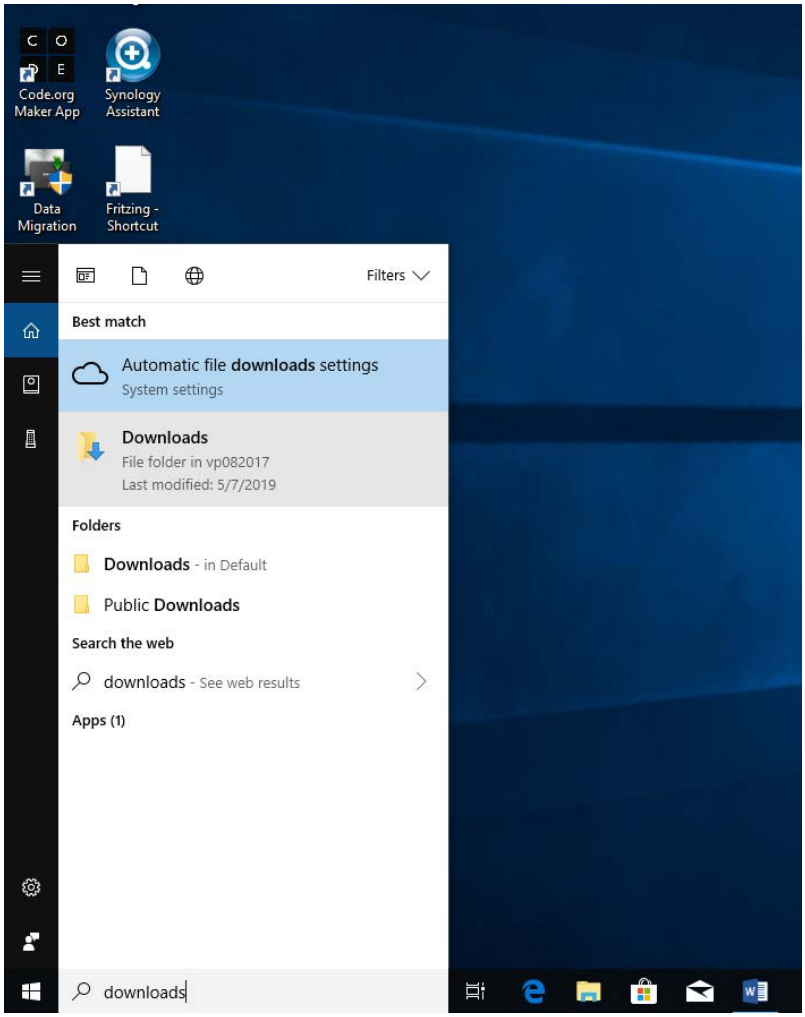
Modified Arduino IDE Install

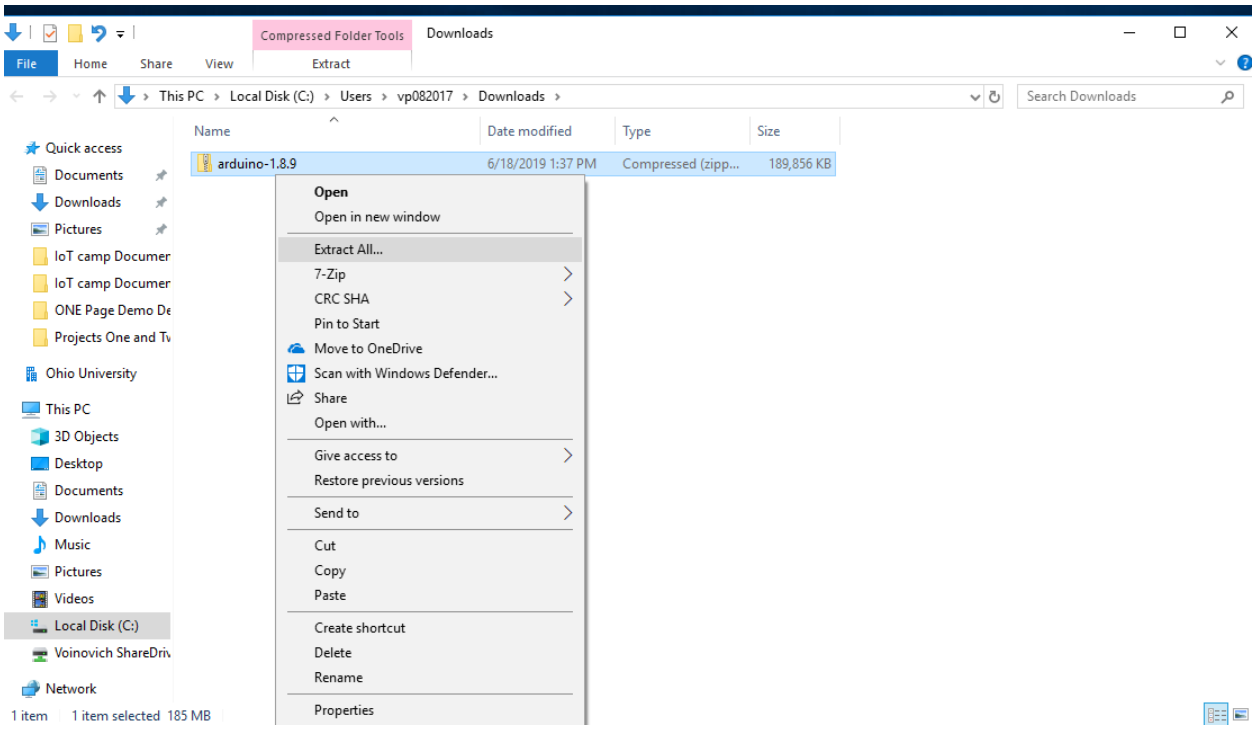
Note: This document will instruct how to install a version of Arduino IDE that has been modified to include the following:

- Blynk Library
- BME280 Temp senor Library
- ESP8266 Boards
- Complete Code of Project 2

The instructions for the manual installation of the above was included in documentation package given to students. The install outlined in this document will already have them installed and not require the manual installation

1. Download the Zip file from the link provided
2. Navigate to downloads and unzip/extract file
3. Click and drag the new folder to the Desktop

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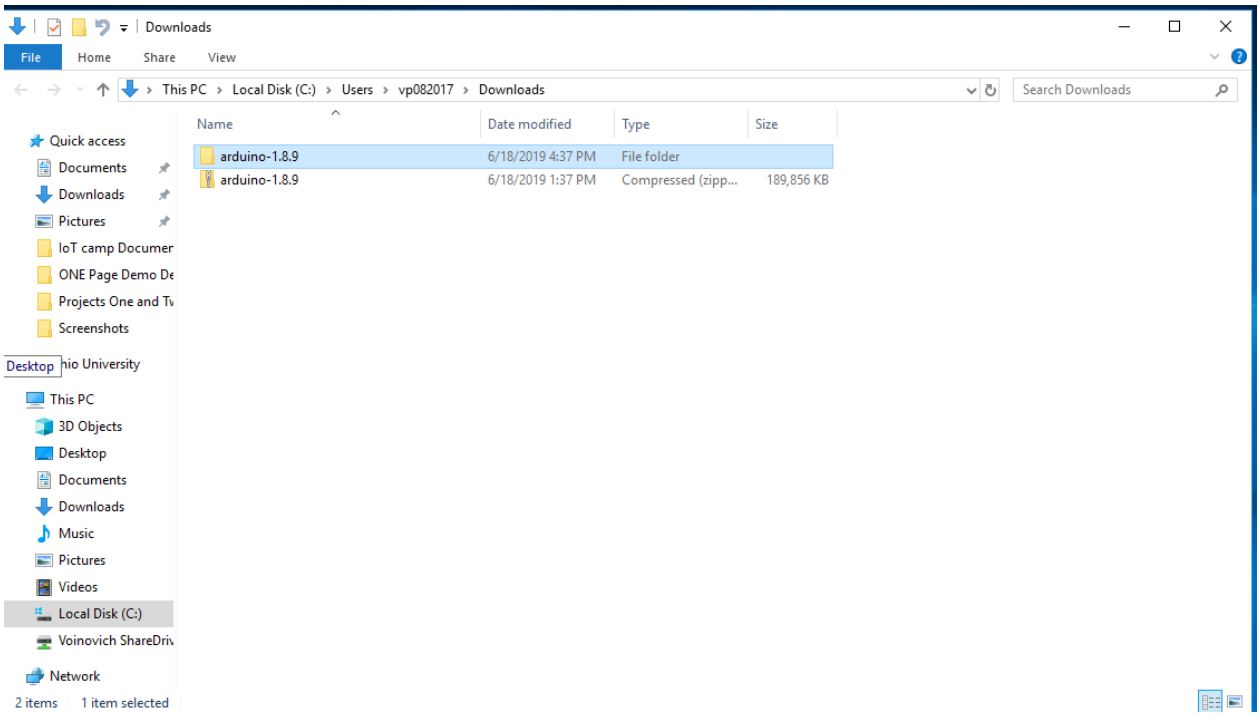
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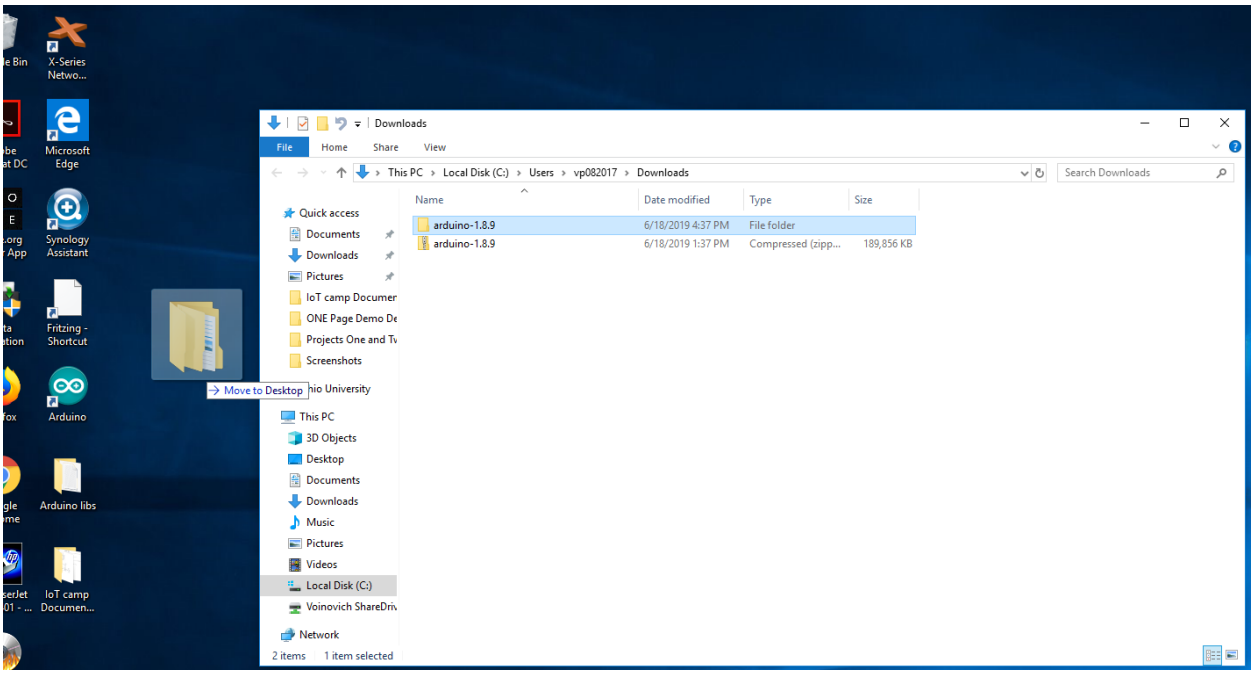
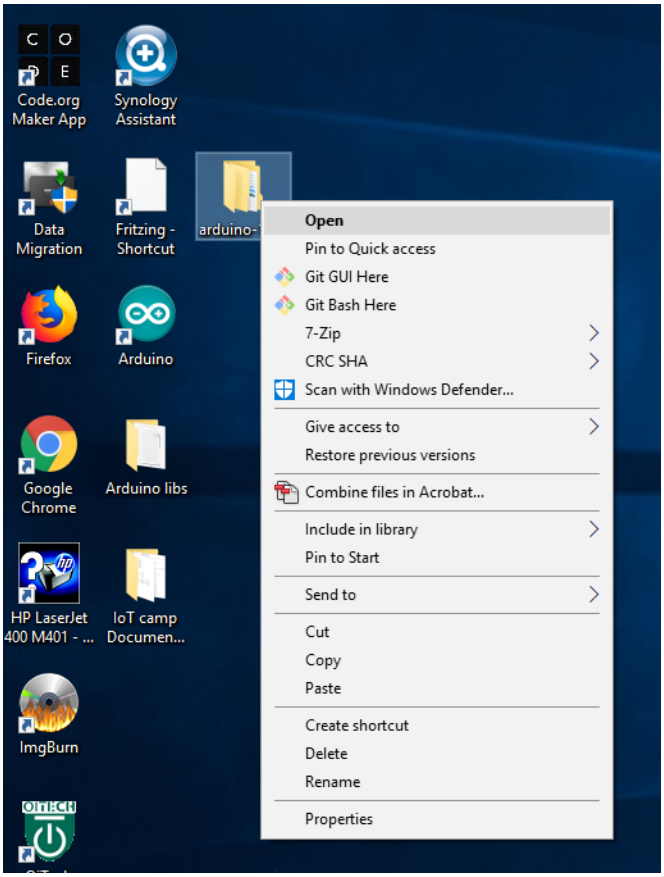
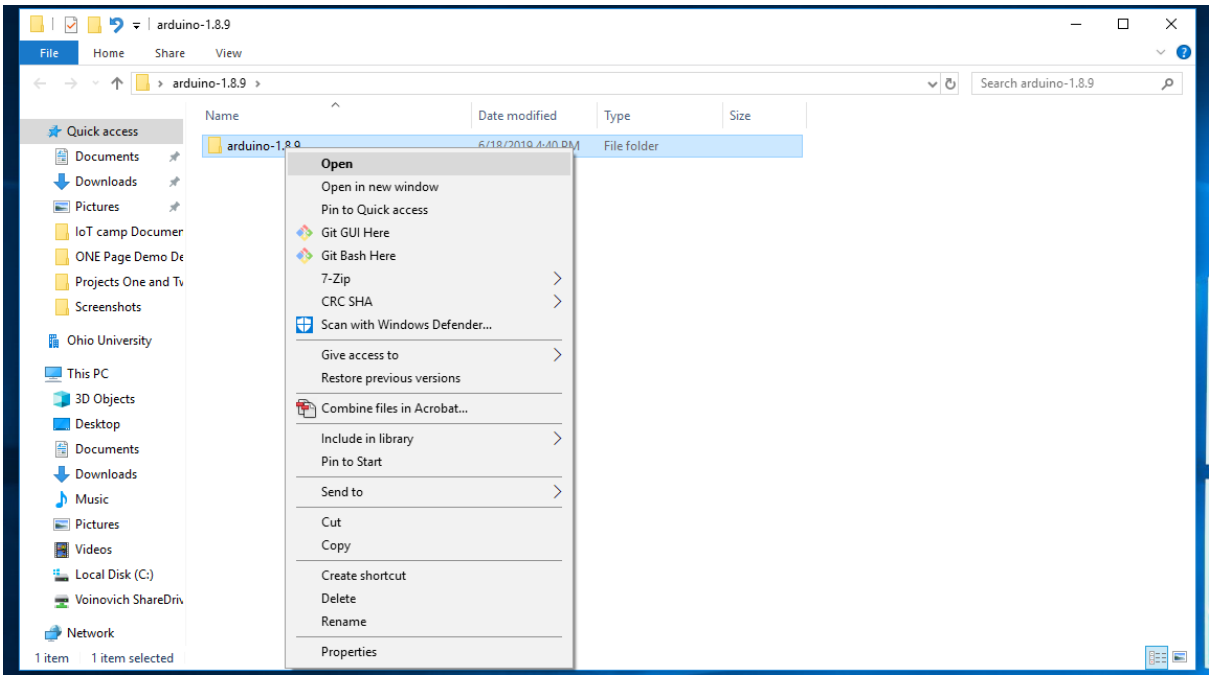


4. Open the Arduino desktop file
5. Open the Arduino 1.8.9 file
6. Open the Arduino application

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Combine files in Acrobat...
Include in library
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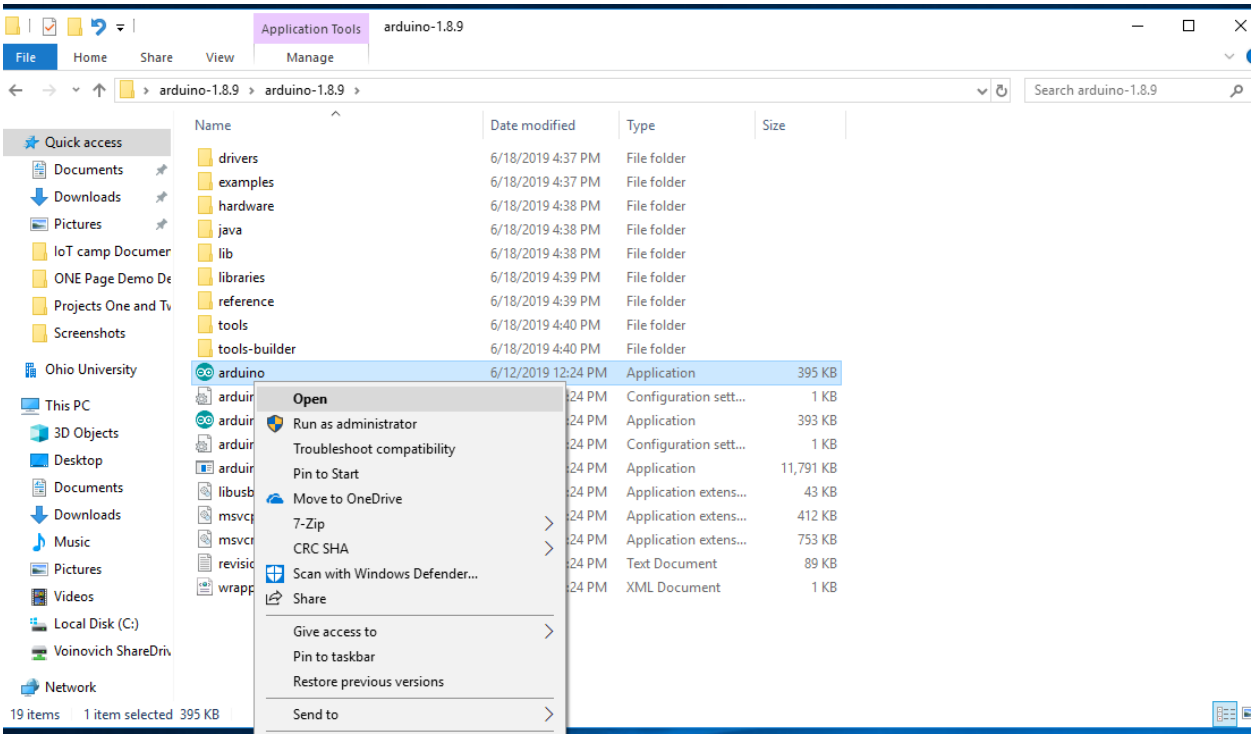
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Application
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Open
Run as administrator
Troubleshoot compatibility
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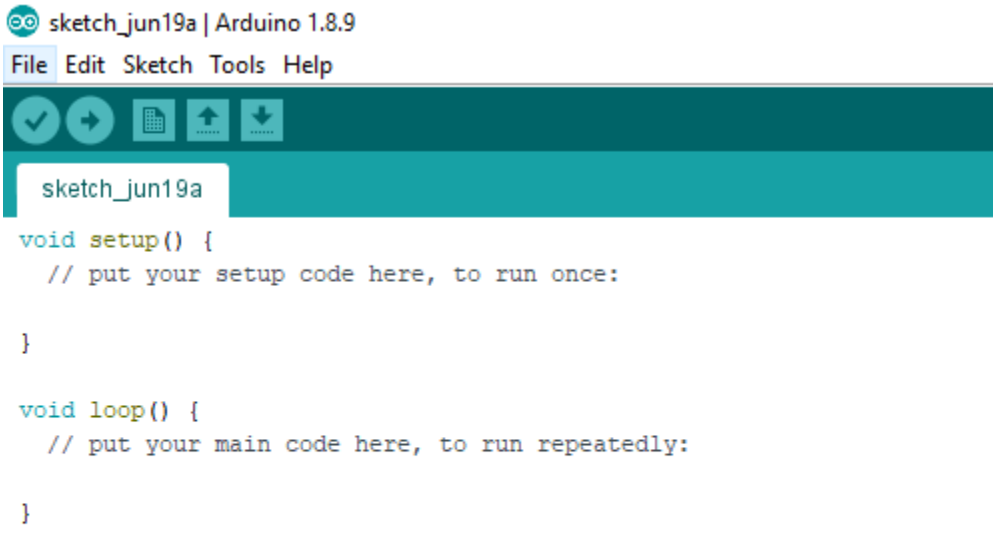
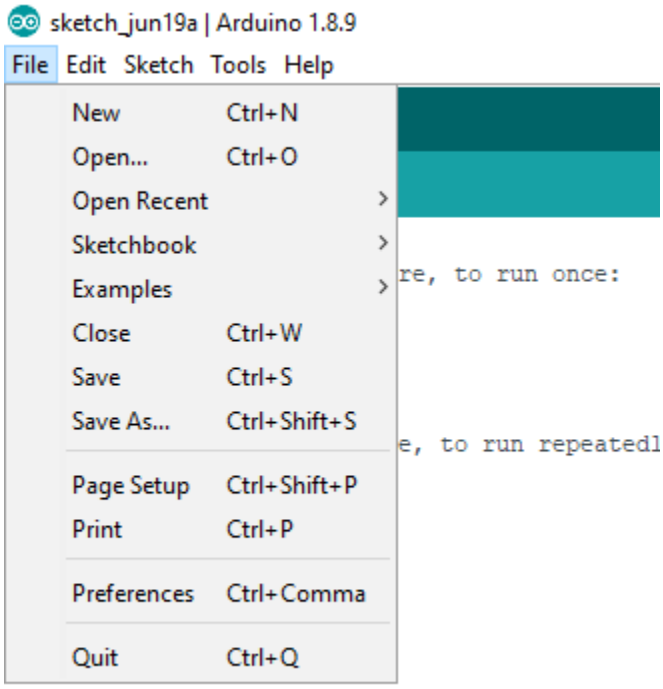
Move to OneDrive
7-Zip
CRC SHA
Scan with Windows Defender...
Share
Give access to
Pin to taskbar
Restore previous versions
Send to

How to access project 2 code:
The code for both parts of project one has been placed inside the examples section of Arduino as a reference for the students. Once opened it can be modified and uploaded to their esp8266 boards.

1. Once Arduino is open navigate to the top left and go to File
2. Go to File > Examples > 12.IoT Camp Project 2
3. Click on either project 1 or 2 for desired code

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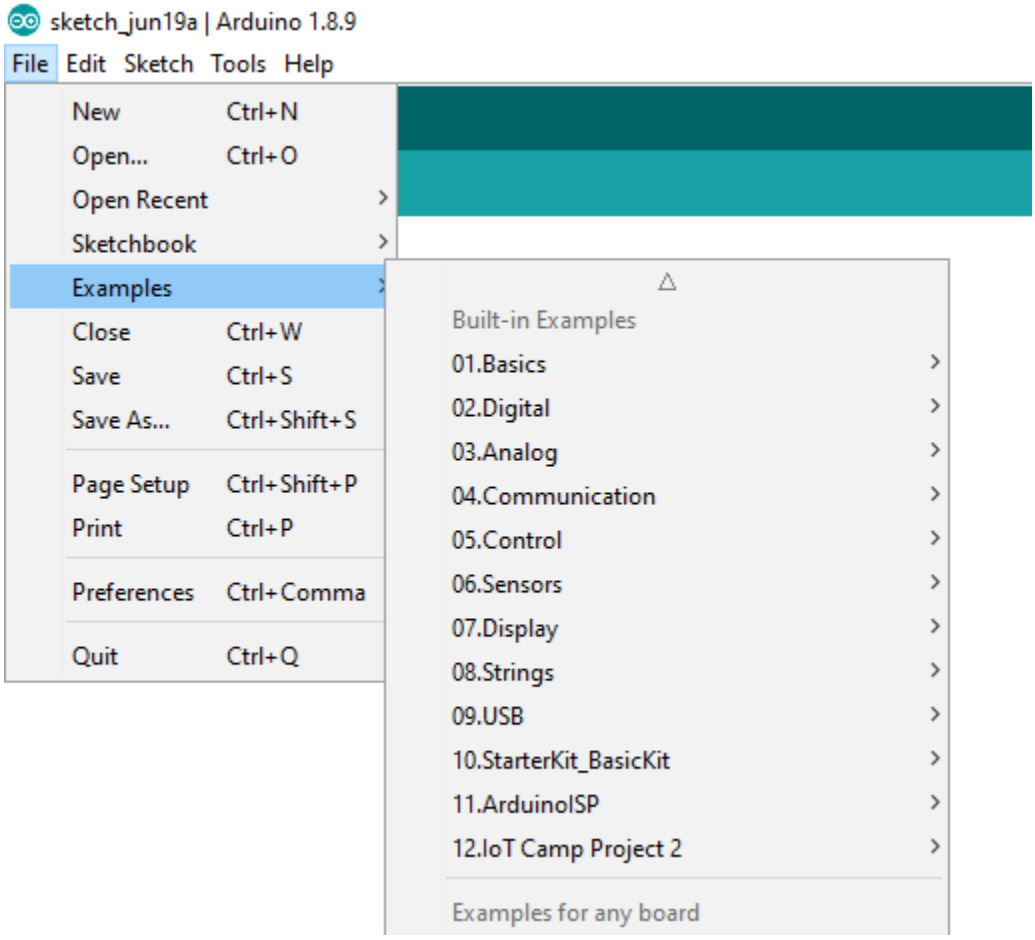
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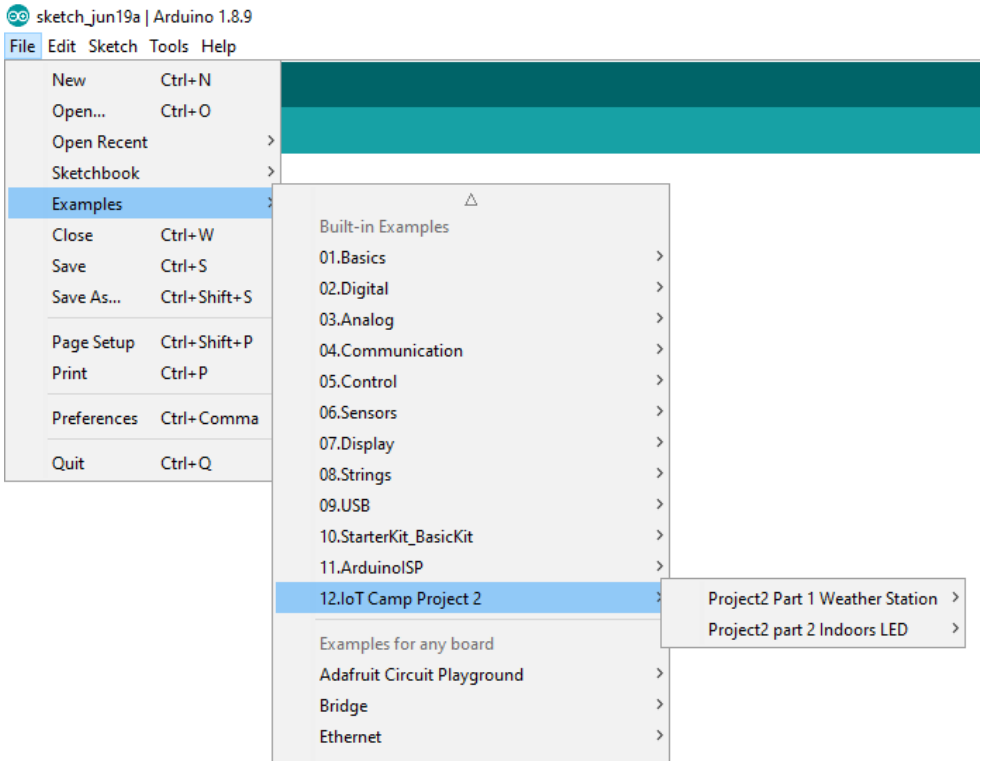
Quit Ctrl+Q
Built-in Examples
01.Basics
02.Digital
03.Analog
04.Communication
05.Control
06.Sensors
07.Display
08.Strings
09.USB
10.StarterKit_BasicKit
11.ArduinoISP
12.IoT Camp Project 2
Examples for any board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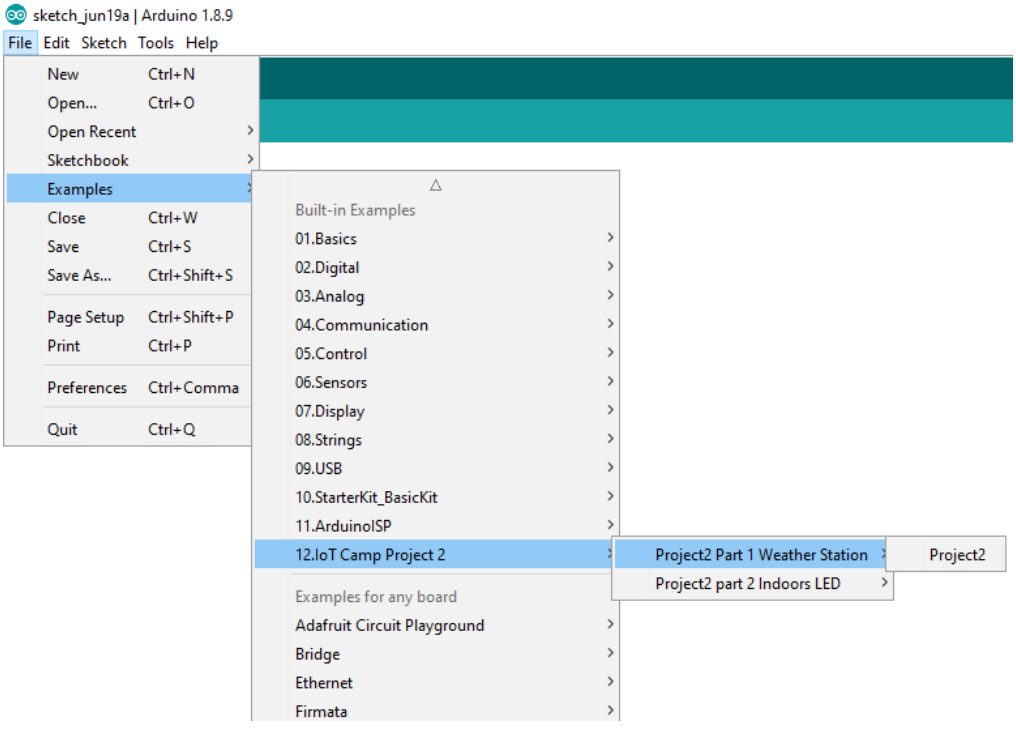
11.ArduinoISP
12.IoT Camp Project 2
Examples for any board
Adafruit Circuit Playground
Bridge
Ethernet
Project2 Part 1 Weather Station
Project2 part 2 Indoors LED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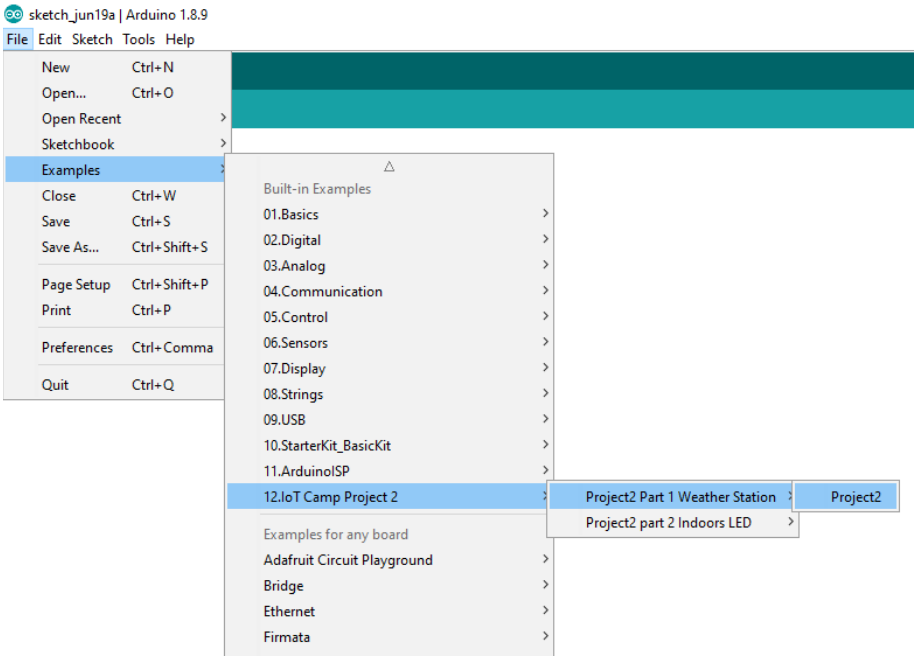
Project2



Note: Students must change Blynk authentication to their own code. Students must change WIFI Username and Password to the network they intend to use.

2-2_Green_prototype

```
#define BLYNK_PRINT Serial                    // This will print debugg
#include <ESP8266WiFi.h>                      // This includes code for
#include <BlynkSimpleEsp8266.h>               // This is the Blynk-comp

const int redPin = 13;                        // Setting the value for
const int bluePin =14 ;                        // Setting the value for
const int greenPin = 12;                      // Setting the value for
double COLD = 60;                             // Setting value for cold
double HOT = 80;                              // Setting value for hot
double global_value1;                         // Will store the reading
double global_value2;                         // Will store the reading
double global_value3;                         // Will store the reading
double global_value4;                         // Will store the reading

char auth[] = "aef43d240a9b4d61b2ac8256860b87e4"; // Within the quotations
char ssid[] = "The Plug";                     // Within the quotations
char pass[] = "theplug123";                   // Within the quotations

void refresh(int pin){                        // a function to refresh
  Blynk.syncVirtual(pin);                     // the Blynk command to
```

```
#define BLYNK_PRINT Serial                                  // This will print debu
#include <ESP8266WiFi.h>                                    // This includes code f
#include <BlynkSimpleEsp8266.h>                             // This is the Blynk-co
#include "Seeed_BME280.h"                                   // This is the code cor
#include <Wire.h>                                           // Links our board (an
// Up to this line links different definition files (libraries) to this file sc


BME280 bme280;                                              // This line names our

char auth[] = "aef43d240a9b4d61b2ac8256860b87e4";           // Within the quotations
                                                            // We set the code to a
char ssid[] = "The Plug";                                   // Within the quotation
char pass[] = "theplug123";                                 // Within the quotation

void setup(){                                               // The setup function,
  Serial.begin(9600);                                       // This line sets up th
```

Char auth[] = “ “; is blynk authentication

Char ssid[] = “ “; is WiFi name

Char pass[] = “ “; is the WiFi password