

Lesson 1

Setting up the Arduino IDE

Course Two

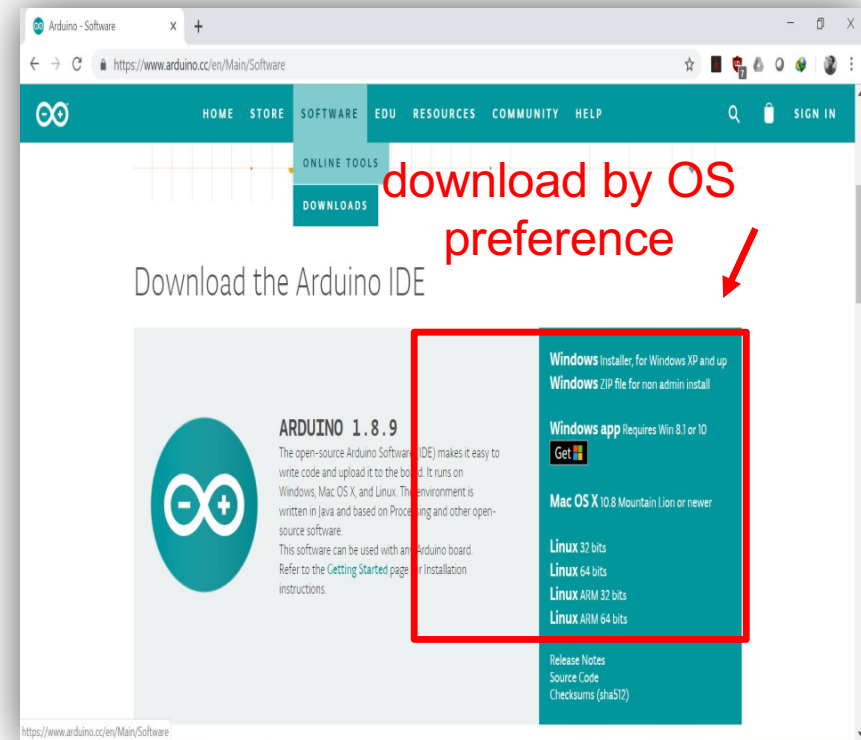


Objectives

- How to download, install and configure the Arduino IDE
- Adding libraries and example codes for prototyping
- Installing hardware drivers
- Wazidev Boards Setting

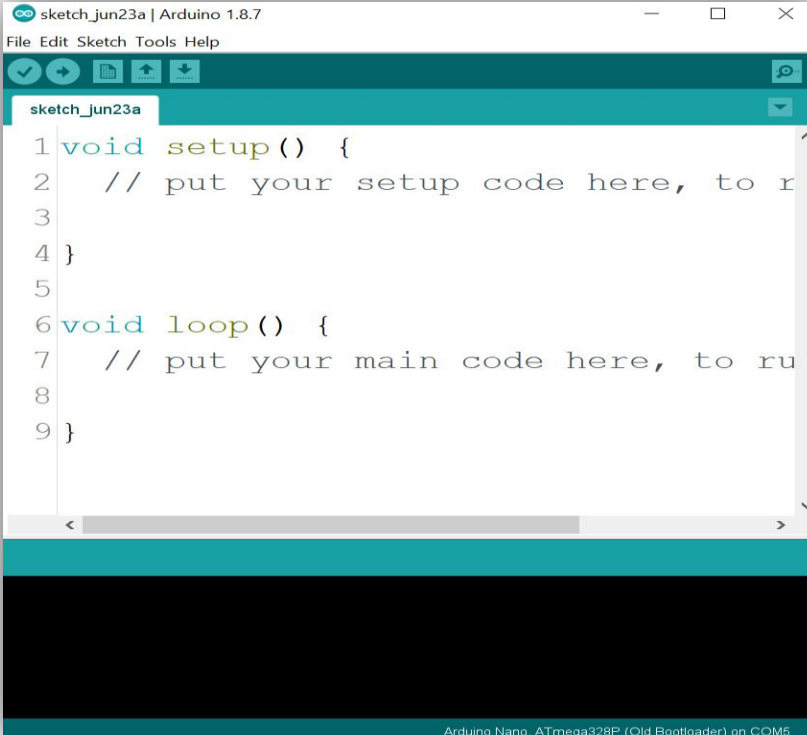
Downloading Arduino IDE

1. Visit **arduino.cc**
2. Under the **software** tab, click **downloads**
3. Click and download the IDE that corresponds to your operating system and install



Setting up the Arduino IDE

1. Open the installed IDE for all default folders to be created.
2. Close the IDE



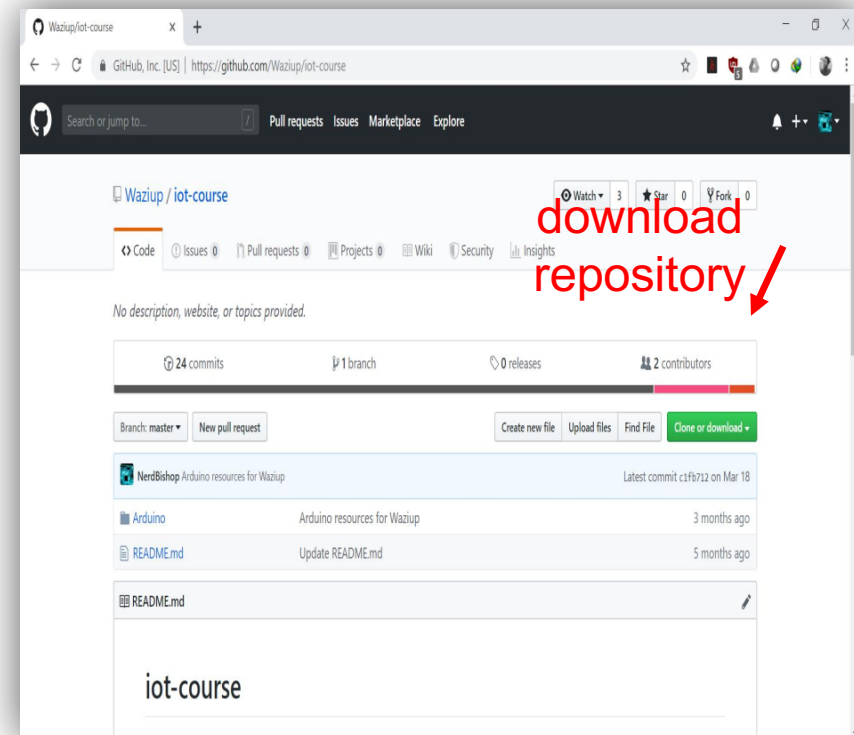
The screenshot shows the Arduino IDE window titled "sketch_jun23a | Arduino 1.8.7". The menu bar includes "File", "Edit", "Sketch", "Tools", and "Help". The toolbar contains icons for check, run, upload, and download. The sketch editor displays the following code:

```
1 void setup() {  
2   // put your setup code here, to r  
3  
4 }  
5  
6 void loop() {  
7   // put your main code here, to ru  
8  
9 }
```

The status bar at the bottom indicates "Arduino Nano, ATmega328P (Old Bootloader) on COM5".

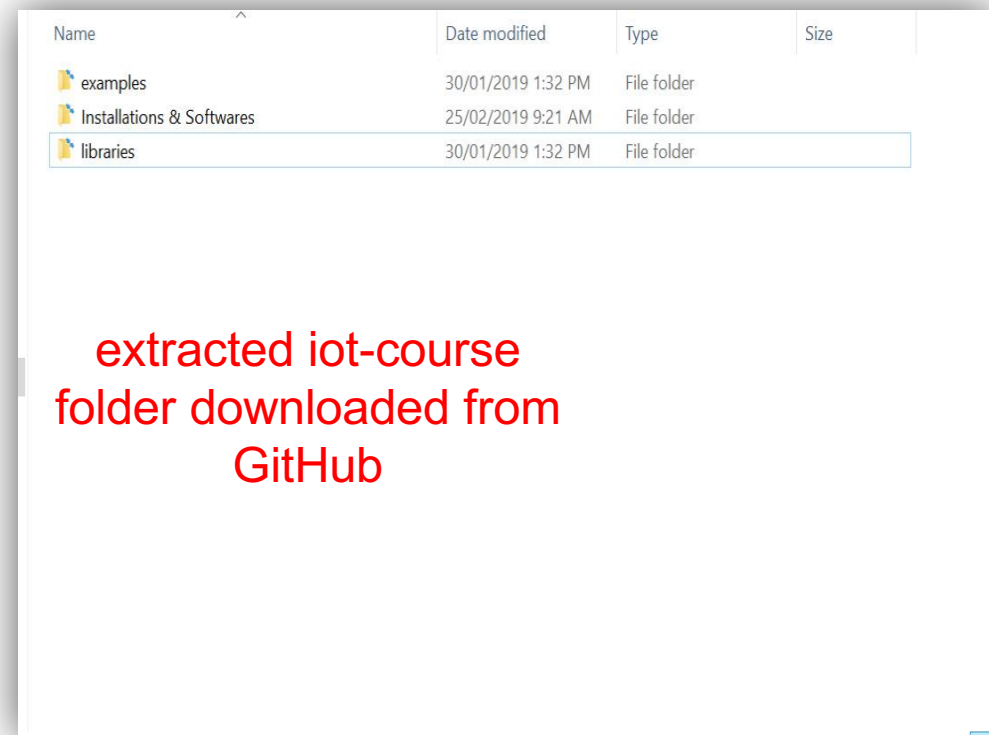
Setting up the Arduino IDE

1. Visit <https://github.com/Waziup/iot-course> and download the repository
2. Extract the contents of the downloaded **iot-course** folder



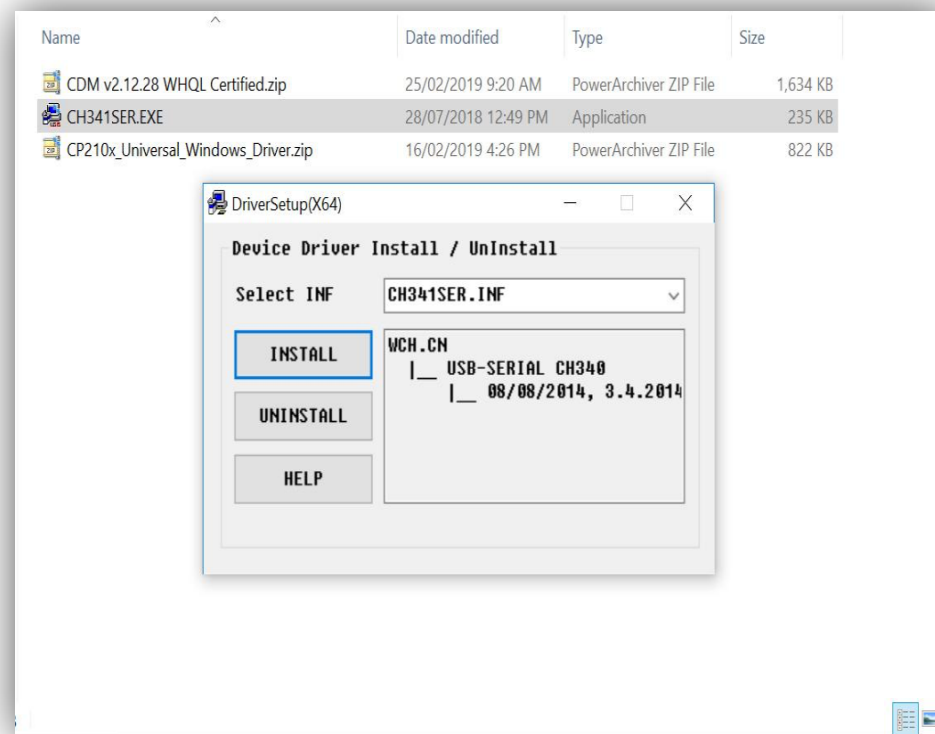
Setting up the Arduino IDE

1. Copy the contents of the **libraries** folder from the extracted **iot-course** folder to
...\Documents\Arduino\libraries
2. Copy the contents of the **examples** folder from the extracted **iot-course** folder to **...\Program Files (x86)\Arduino\examples**



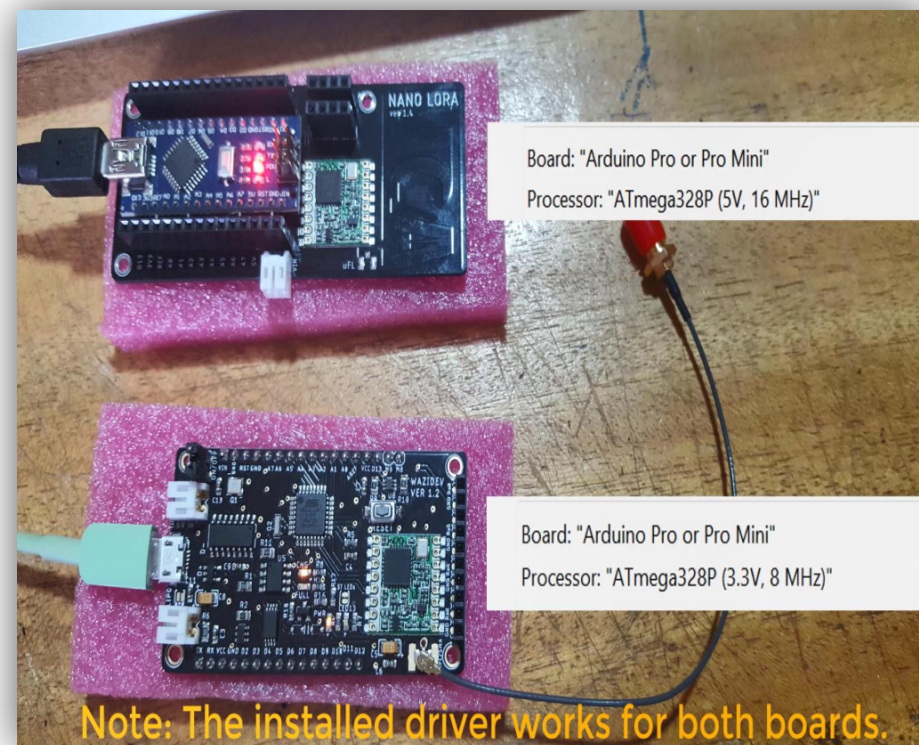
Installing Hardware Drivers

1. Install the **CH341SER.EXE** driver in the extracted iot-course folder.
2. This driver would enable all **Wazidev boards** work.



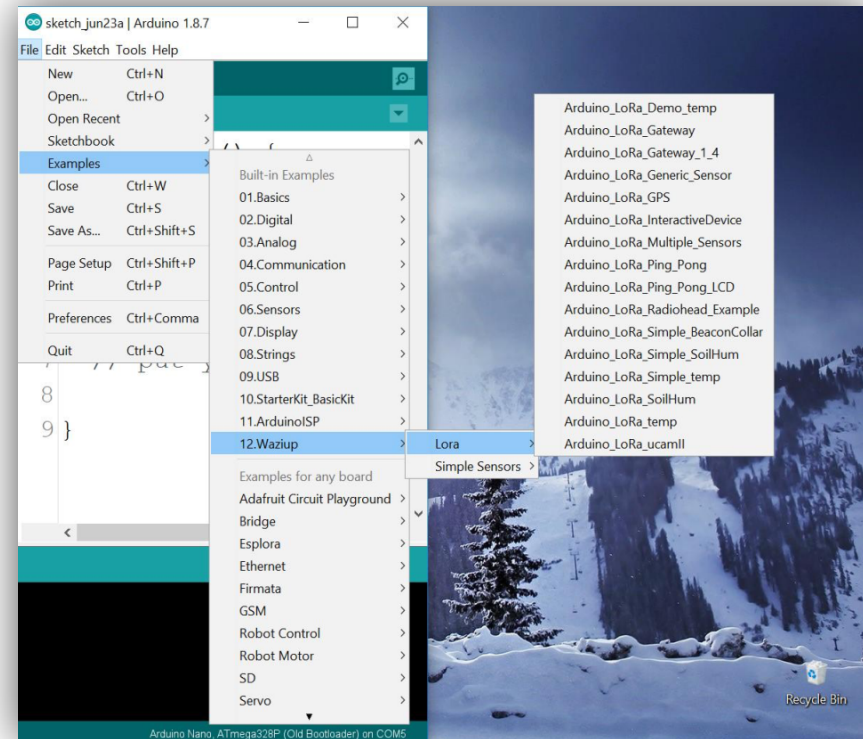
Wazidev Boards Setting

Both Wazidev boards use a common driver, however they need different board settings to work as shown.



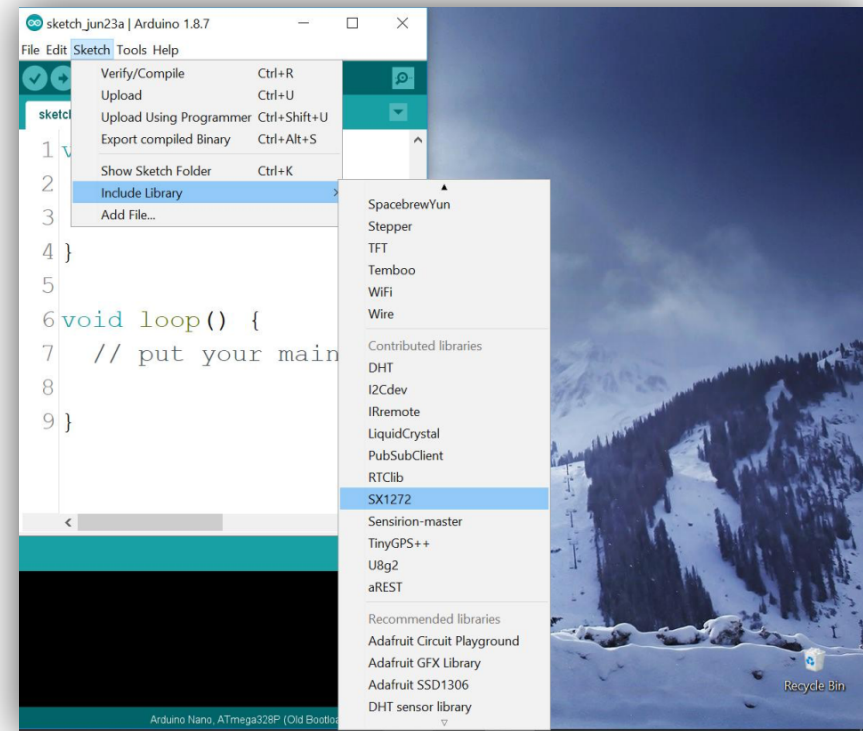
Conclusion - Examples

If all is set well **12.Waziup** would be part of the **examples** listed in ones IDE



Conclusion - Libraries

If all is set well there will be **SX1276**, **U8g2**, **I2Cdev** among others in ones list of libraries



Setting up the Arduino IDE

Reference Materials

- <https://www.arduino.cc/en/Main/Software>
- <https://github.com/Waziup/iot-course>