



The Canadian Satellite Design Challenge Management Society presents...

The CanSat Kit

for

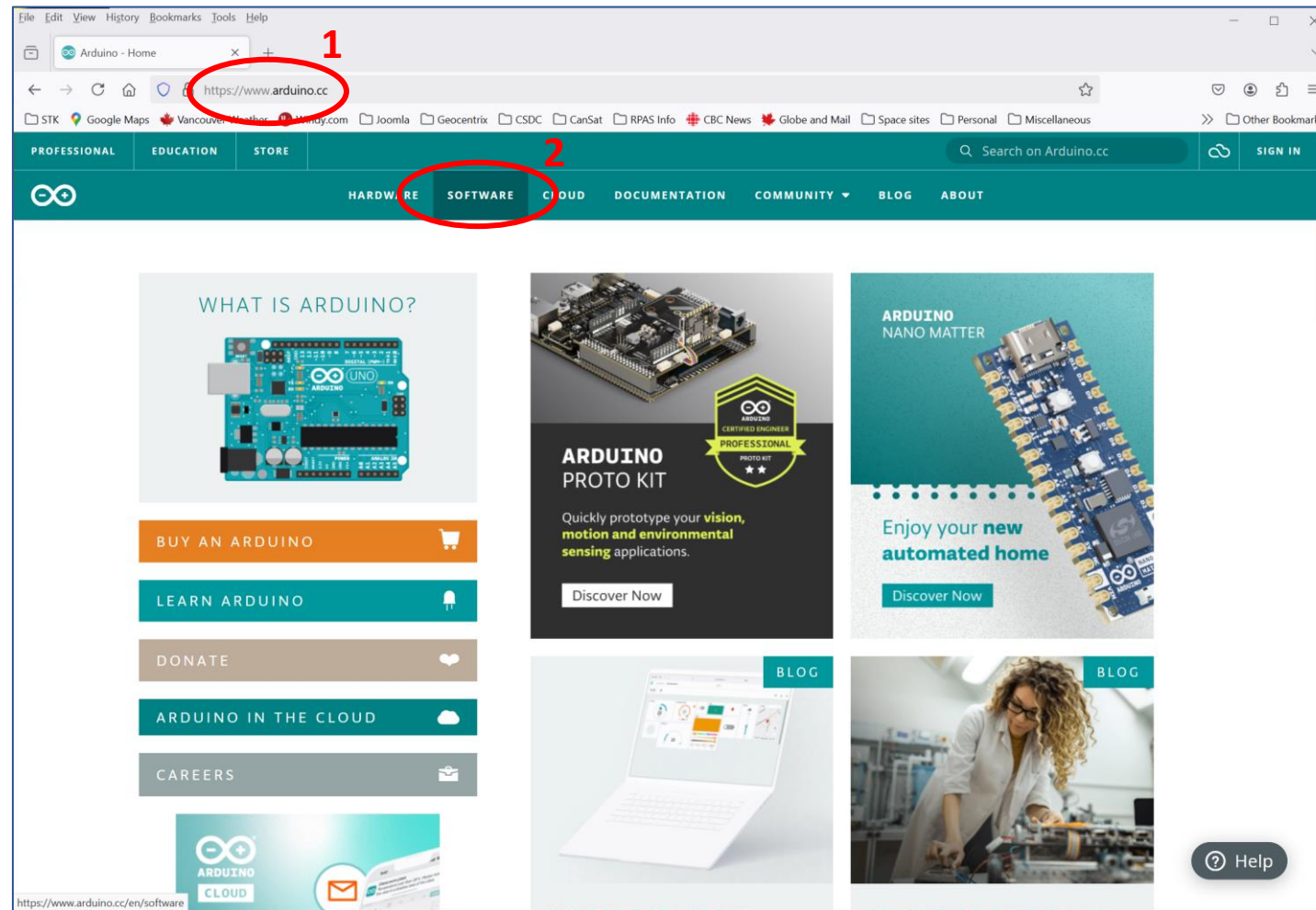
DUMMIES

Future Space Scientists & Engineers!

Tutorial #2: Installing the Arduino IDE

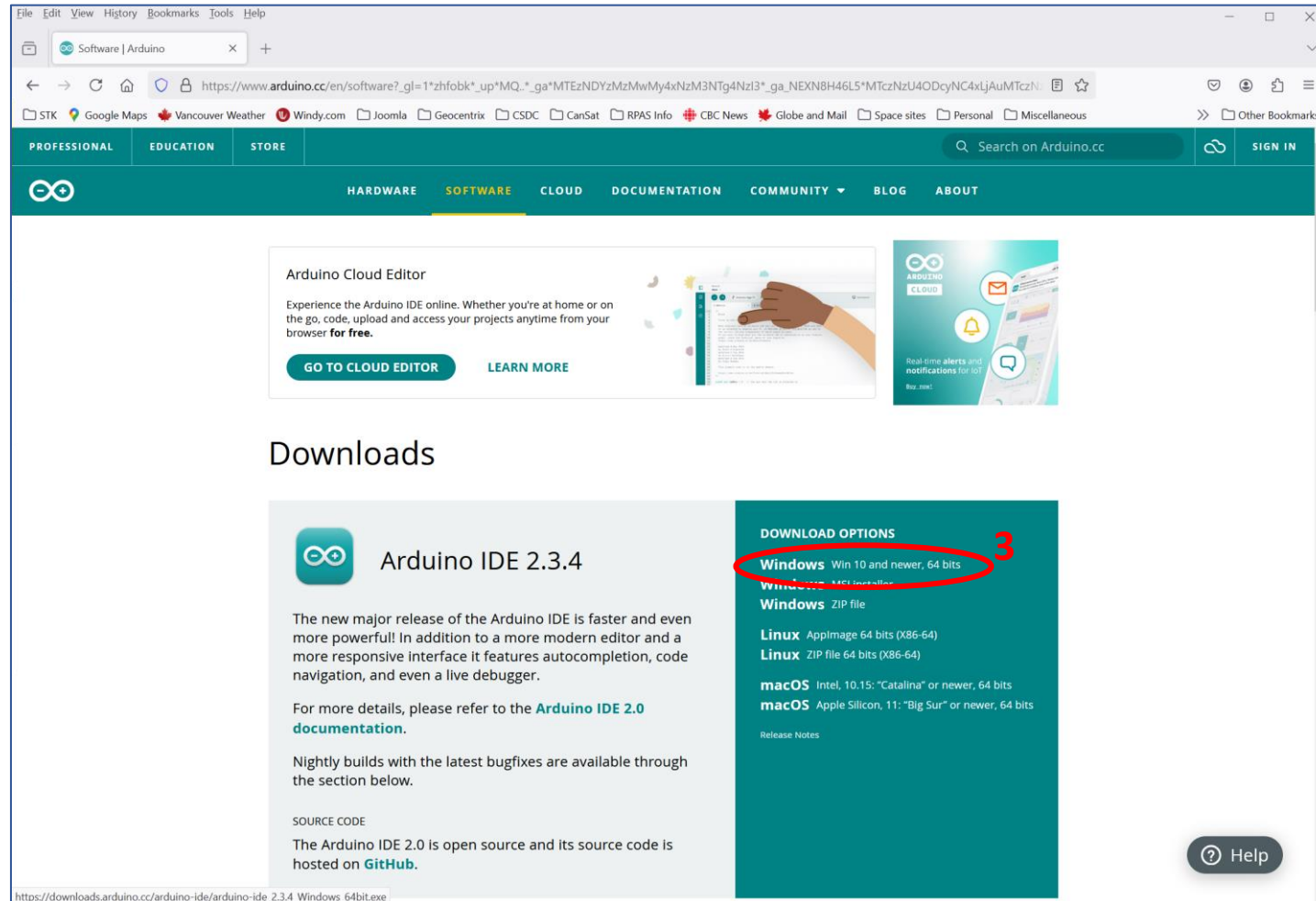
Download the IDE...

1. Open a web browser and enter the website URL "arduino.cc"
2. Click on the "Software" menu item.



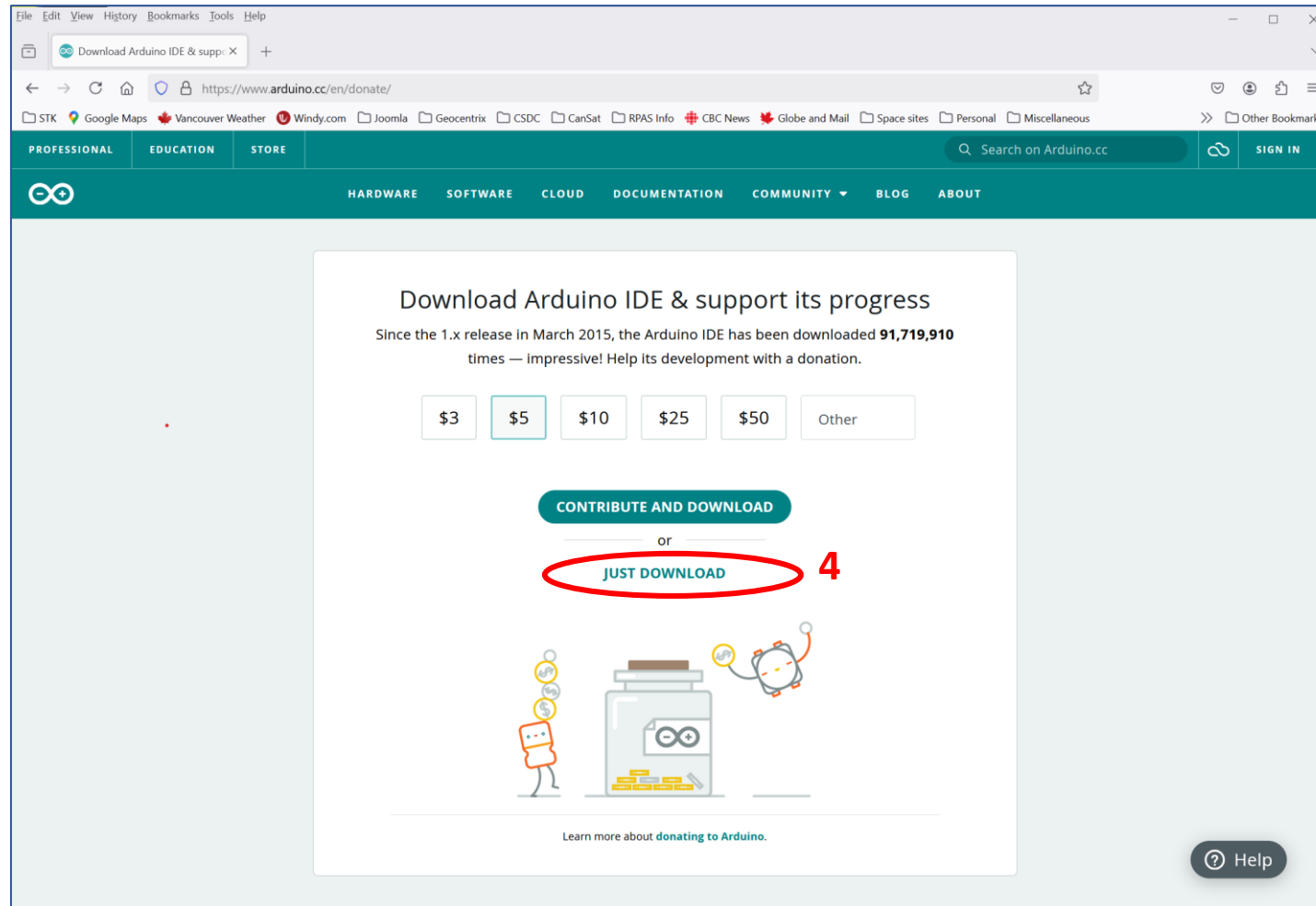
Download the IDE (2/4)

3. Click on the “Windows” download option (or “Linux” or “macOS”, depending on your computer & operating system)



Download the IDE (3/4)

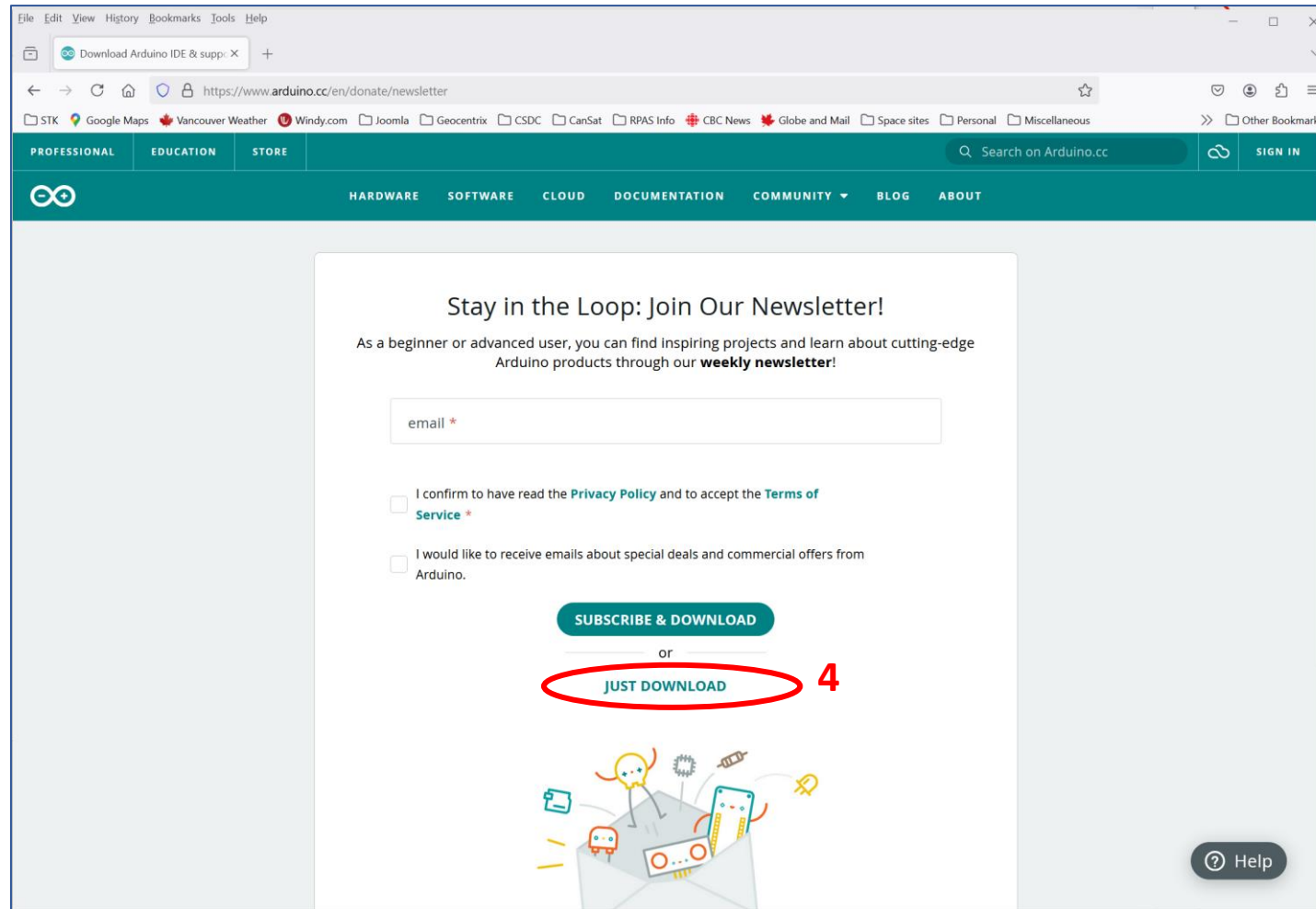
4. Click on “Just Download” (CSDCMS has made a donation)



The screenshot shows a web browser window displaying the Arduino.cc donation page. The browser's address bar shows the URL <https://www.arduino.cc/en/donate/>. The page features a teal navigation bar with the Arduino logo and menu items: PROFESSIONAL, EDUCATION, STORE, HARDWARE, SOFTWARE, CLOUD, DOCUMENTATION, COMMUNITY, BLOG, and ABOUT. The main content area is titled "Download Arduino IDE & support its progress" and includes the text: "Since the 1.x release in March 2015, the Arduino IDE has been downloaded **91,719,910** times — Impressive! Help its development with a donation." Below this text are five donation amount buttons: \$3, \$5, \$10, \$25, and \$50, along with an "Other" button. A prominent teal button labeled "CONTRIBUTE AND DOWNLOAD" is positioned above the word "or". Below "or", the text "JUST DOWNLOAD" is displayed in teal and is circled in red, with a red number "4" to its right. At the bottom of the page, there is an illustration of a robot holding a coin, a jar of coins, and another robot, with the text "Learn more about donating to Arduino." and a "Help" button.

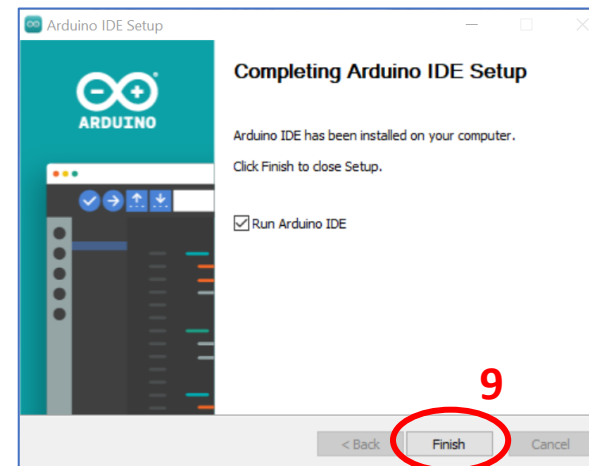
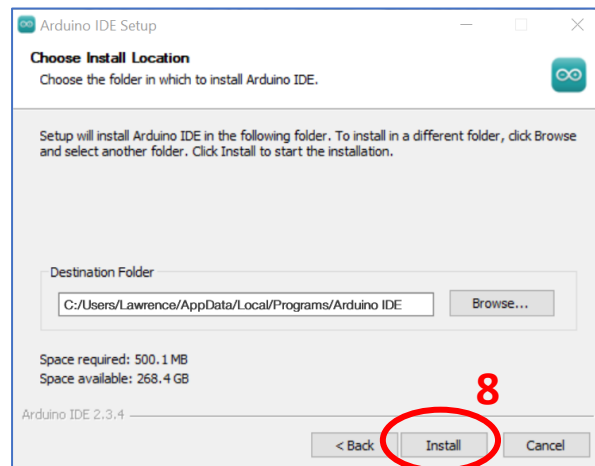
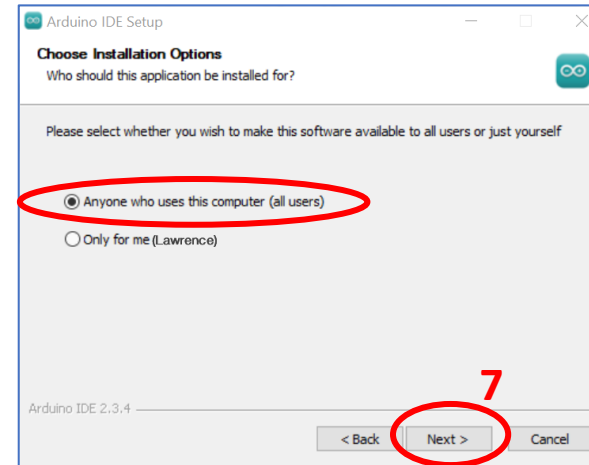
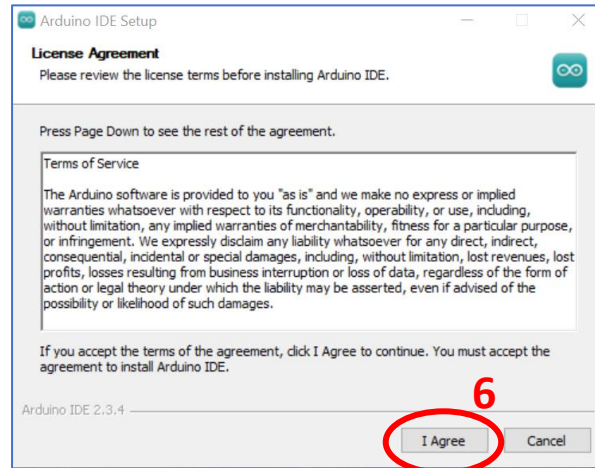
Download the IDE (4/4)

5. Click on “Just Download” (although you can subscribe to the newsletter if you wish). When the program is finished downloading, run it (filename is “arduino-ide_2.3.4_Windows_64bit.exe” in your Downloads folder).



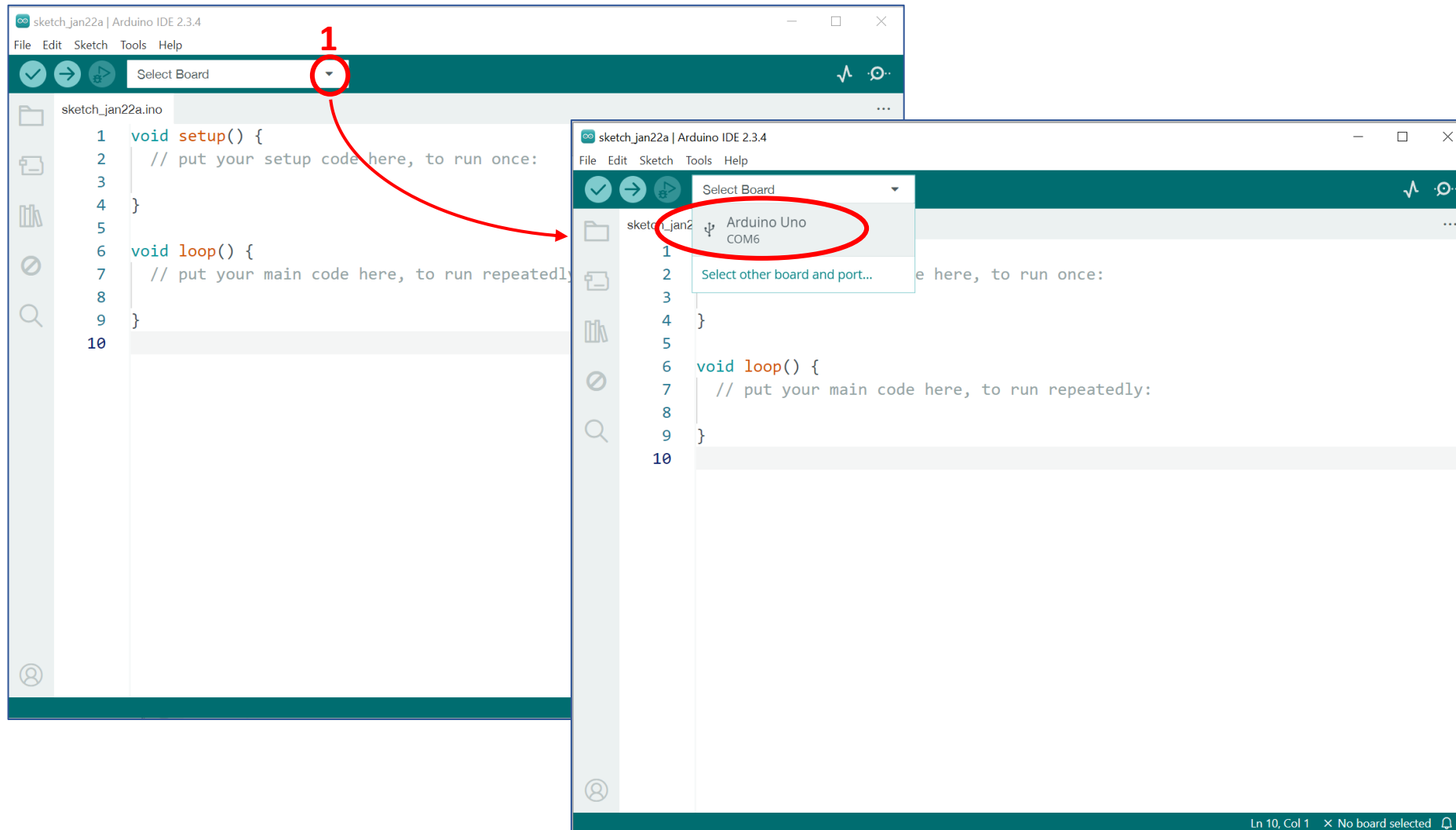
Install the Program

6. Click on “I Agree” for the Licence Agreement
7. Select “Anyone who uses this computer (all users)” and click “Next”
8. You can use the default directory, then press “Install”
9. When done, click on “Finish”, and the Arduino IDE will start.



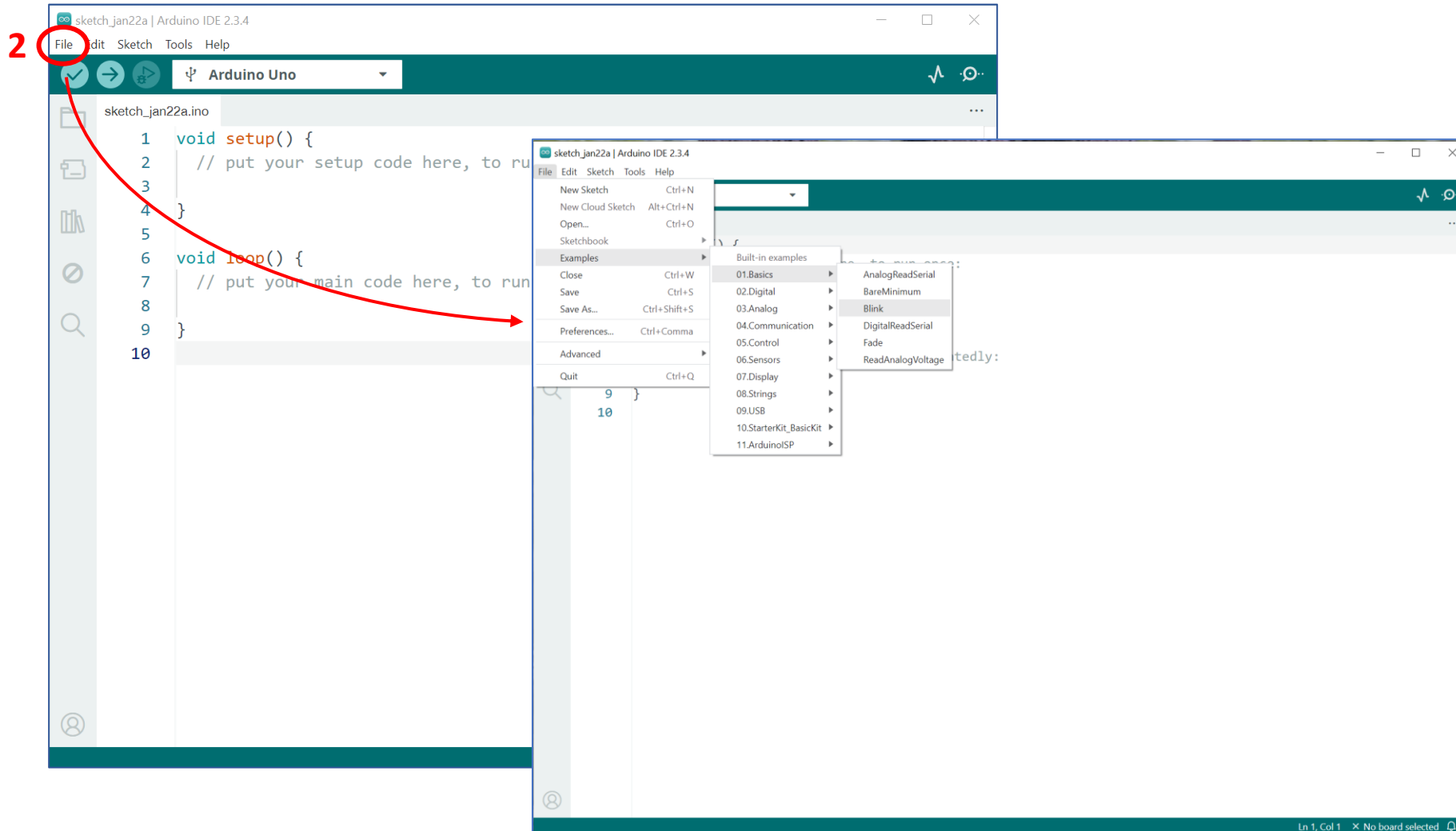
Running Your First Program (1/3)

1. Click on the "Select Board" drop-down arrow, and select the "Arduino Uno" option (should be the only one)



Running Your First Program (2/3)

2. Select "File -> Examples -> 01.Basics -> Blink"



Running Your First Program (3/3)

3. Click on the “Upload” arrow. After a few seconds, the light on the Arduino should start blinking on and off once per second.

3

```
Blink.ino
1  /*
2  Blink
3
4  Turns an LED on for one second, then off for one second, repeatedly.
5
6  Most Arduinos have an on-board LED you can control. On the UNO, MEGA and ZERO
7  it is attached to digital pin 13, on MKR1000 on pin 6. LED_BUILTIN is set to
8  the correct LED pin independent of which board is used.
9  If you want to know what pin the on-board LED is connected to on your Arduino
10 model, check the Technical Specs of your board at:
11 https://www.arduino.cc/en/Main/Products
12
13 modified 8 May 2014
14 by Scott Fitzgerald
15 modified 2 Sep 2016
16 by Arturo Guadalupi
17 modified 8 Sep 2016
18 by Colby Newman
19
20 This example code is in the public domain.
21
22 https://www.arduino.cc/en/Tutorial/BuiltInExamples/Blink
23 */
24
25 // the setup function runs once when you press reset or power the board
26 void setup() {
27   // initialize digital pin LED_BUILTIN as an output.
28   pinMode(LED_BUILTIN, OUTPUT);
29 }
30
31 // the loop function runs over and over again forever
32 void loop() {
33   digitalWrite(LED_BUILTIN, HIGH); // turn the LED on (HIGH is the voltage level)
34   delay(1000); // wait for a second
35   digitalWrite(LED_BUILTIN, LOW); // turn the LED off by making the voltage LOW
36   delay(1000); // wait for a second
37 }
38
```

Ln 1, Col 1 - Arduino Uno on COM6

