1. Introduction:

This lab manual is created to guide students through the process of downloading and installing Proteus 8 Professional and setting up the Arduino Uno environment for future circuit simulations. Proteus is widely used for virtual testing of electronic circuits, especially in academic and engineering projects involving microcontrollers like Arduino.

2. Objective:

The main goal is to help students properly install Proteus 8 Professional and Arduino IDE on their systems so they can later simulate Arduino-based circuits. This foundational setup is crucial for future labs involving circuit design and simulation.

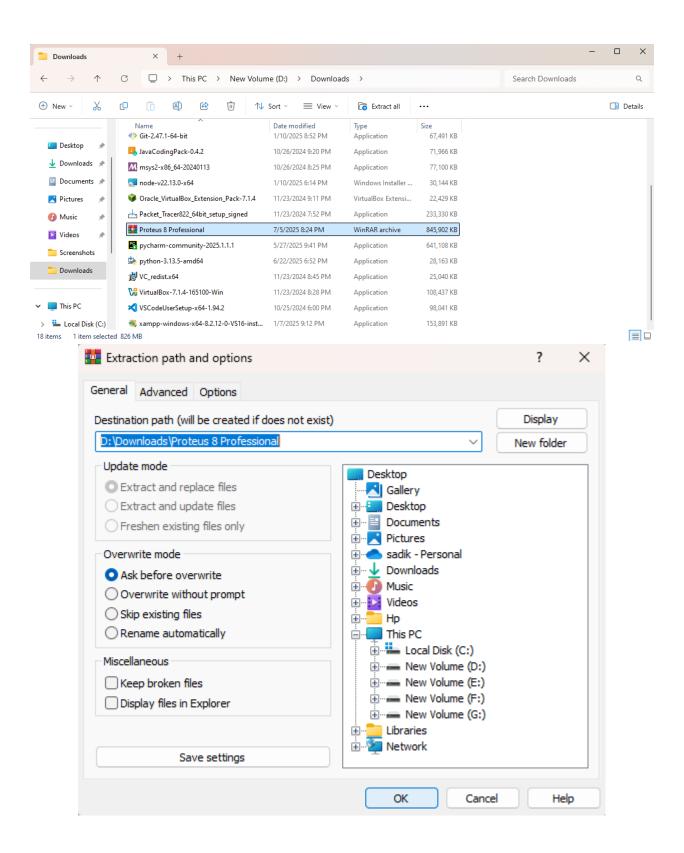
3. Tools Required:

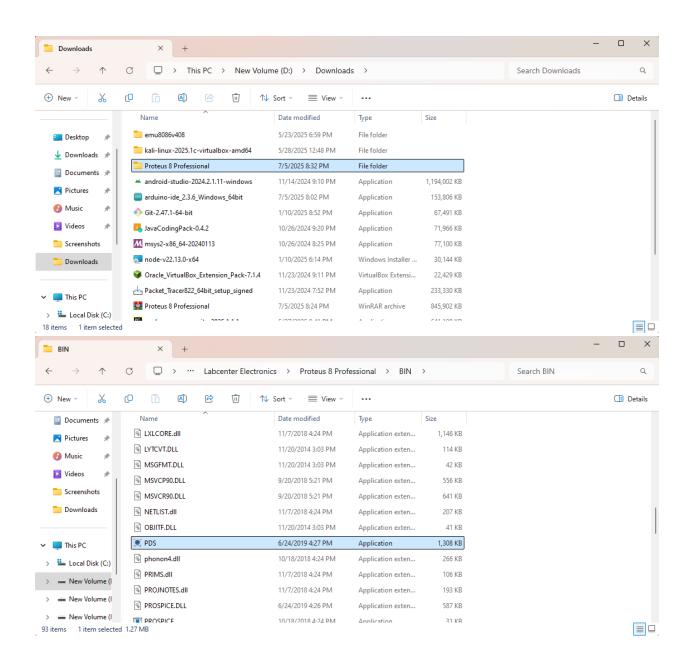
- A computer running Windows 7/8/10/11
- Internet connection
- Proteus 8 Professional installer
- Arduino IDE installer

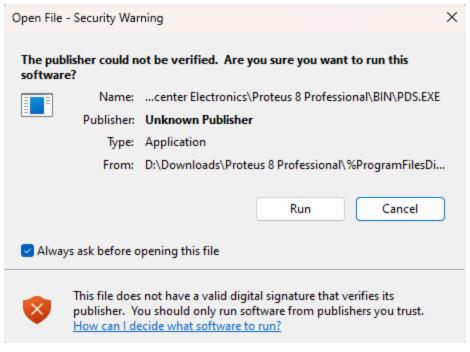
4. Downloading and Installing Required Software

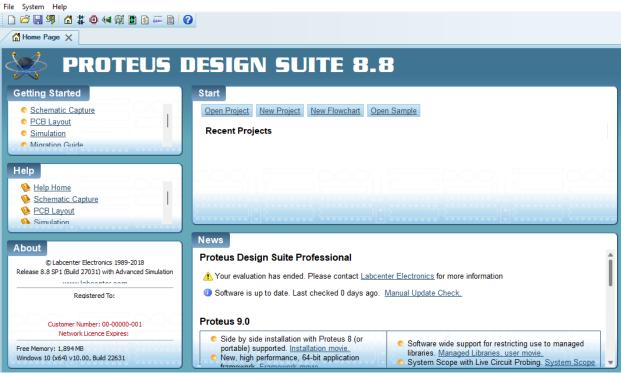
4.1 Install Proteus 8 Professional

- 1. Download Proteus 8 Professional from unofficial site.
- 2. Extract the ZIP file if needed.
- Run the setup file (setup.exe or ProteusSetup.exe).
- 4. Click Next and follow the on-screen installation steps.
- 5. Activate the software using the given key or instructions.
- 6. Launch Proteus from the Start menu.





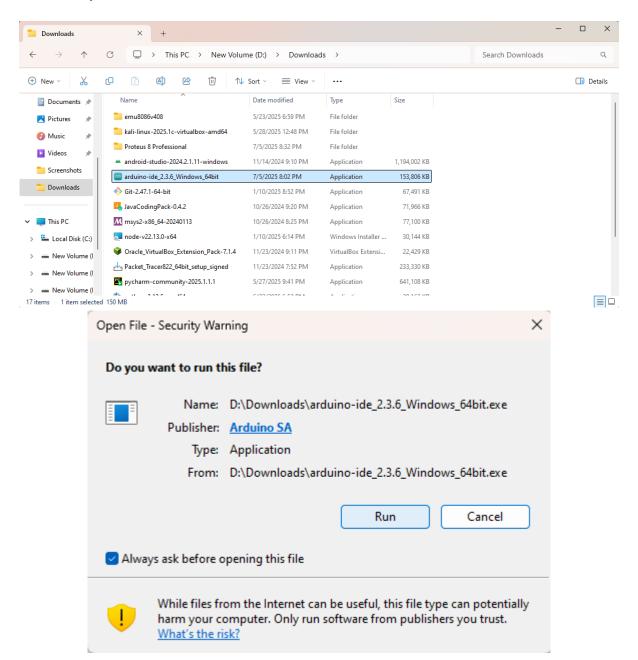


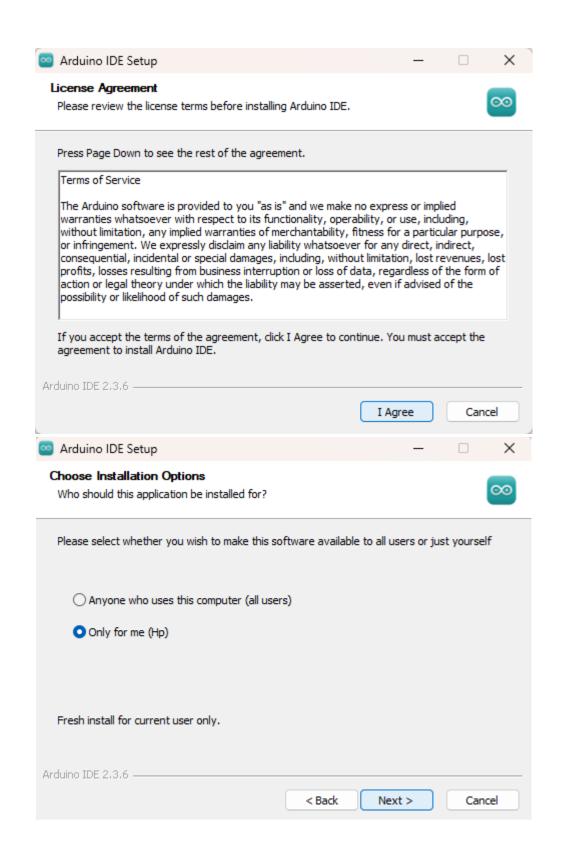


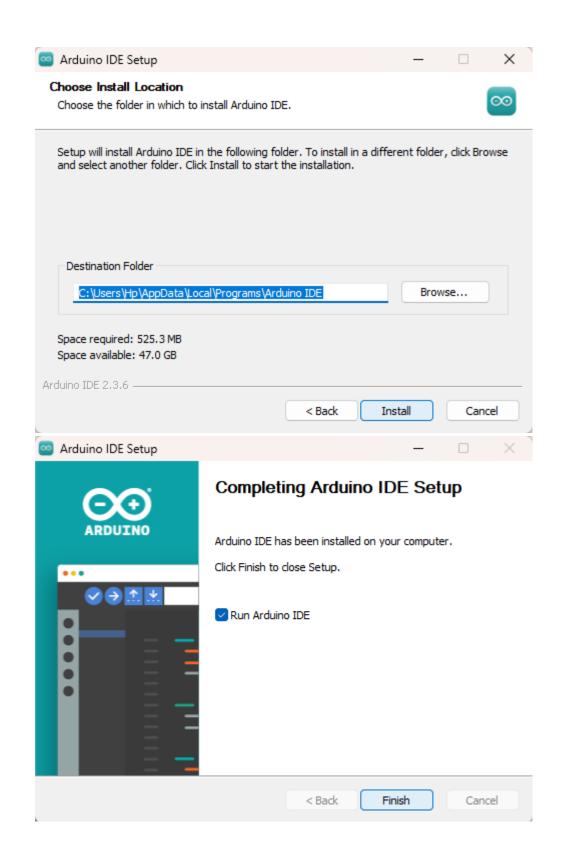
4.2 Install Arduino IDE

- 1. Visit https://www.arduino.cc/en/software.
- 2. Download the Windows installer version.

- 3. Open the installer and click Next through all steps.
- 4. Complete installation and launch Arduino IDE.







```
sketch_jul5a | Arduino IDE 2.3.6
File Edit Sketch Tools Help
                                                                                                               √ .⊙.
                 Select Board
      sketch_jul5a.ino
              void setup() {
          1
          2
                // put your setup code here, to run once:
          3
          4
          6
              void loop() {
                // put your main code here, to run repeatedly:
          8
          9
         10
                                                                                                                   ≡ 6
      Output
        LiquidCrystal@1.0./
        Installing LiquidCrystal@1.0.7
        Installed LiquidCrystal@1.0.7
        Downloading Firmata@2.5.9
        Firmata@2.5.9
        Installing Firmata@2.5.9
        Installed Firmata@2.5.9
                                                                                       Ln 1, Col 1 × No board selected ♀ □
```

5. Conclusion:

This lab provided the foundational steps to install and set up Proteus 8 Professional and Arduino IDE. With these tools installed, students are now ready to move forward with more complex tasks such as writing Arduino code, compiling it, and performing simulations in Proteus in future labs.