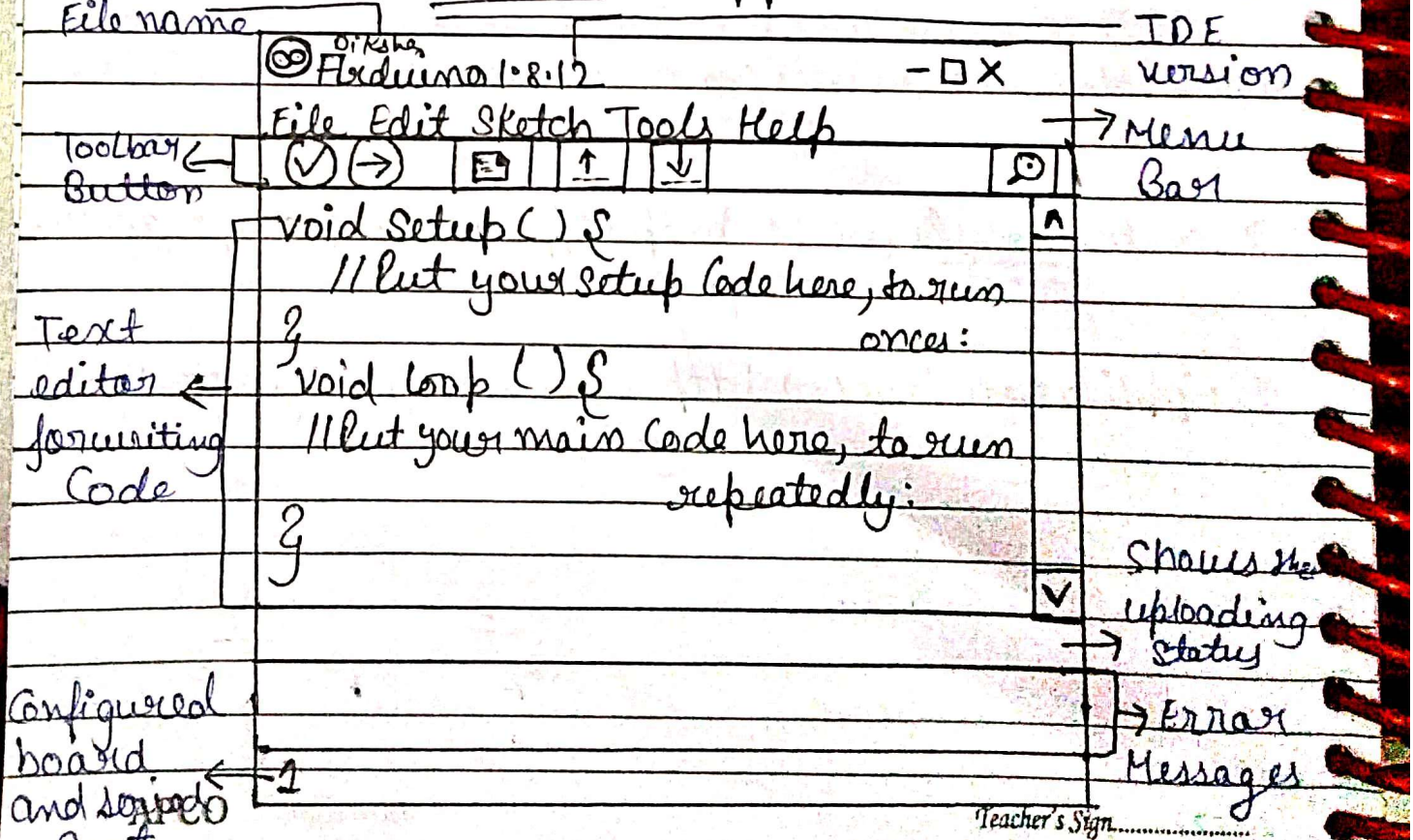
unit → 3 IOT

Date. 16. Sept. 2024

→ Introduction of Arduino IDE :→ The Arduino IDE is an open-source Software, which is used to write and upload code to the Arduino boards. The IDE app. is suitable for different operating system such as Windows, Mac OS X, and Linux. It supports the programming languages C and C++. Here IDE stands for Integrated Development Environment.

The Program or code written in the Arduino IDE is often called as Sketching. We need to connect the Genuino and Arduino board with the IDE to upload the Sketch written in the Arduino IDE Software. The Sketch is saved with the extension '.ino'.

→ The Arduino IDE will appear as :→

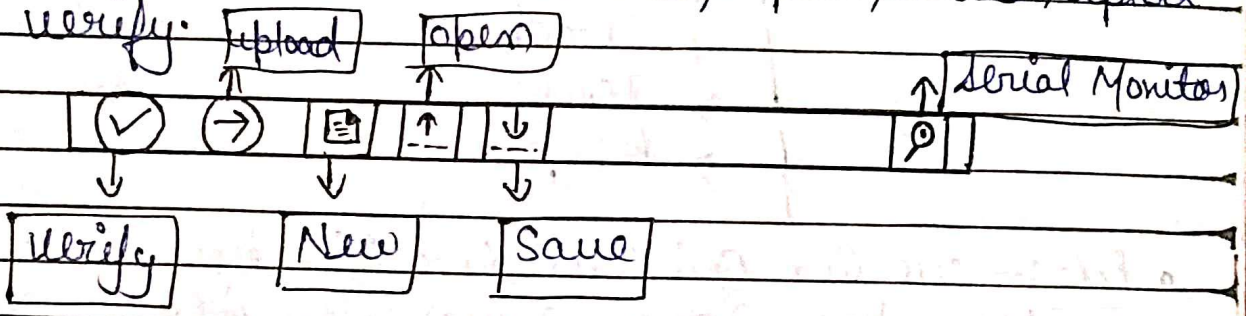


Teacher's Sign.....

Date.....

→ let's discuss each section of the Arduino IDE display in detail :→

① Toolbar button :→ The icons displayed on the toolbar are New, Open, Save, Upload and verify.



- Upload :→ The upload button compiles and runs our code written on the screen. It further uploads the code to the connected board.
- Open :→ The open button is used to open the already created file. The selected file will be opened in the current window.
- New :→ It is used to create a new sketch or opens a new window.
- Save :→ The Save button is used to save the current sketch or code.
- Verify :→ The verify button is used to check the compilation error of the sketch or the written code.
- Serial Monitor :→ The serial monitor button is present on the right corner of the toolbar. It opens the serial monitor ~~where~~ when we connect

Teacher's Sign.....

Date.....

the serial monitor, the board will reset on the Operating System windows, linux and Mac OSX.

② Menu Bar :→
- File
- edit
- Sketch
- Tools
- Help.

- File :→ we can click on the File button on the Menu bar, a drop-down list will appear. It is shown below :→

File	
New	Ctrl+N
Open...	Ctrl+O
Open Recent	>
Sketchbook	>
Example	>
Close	Ctrl+W
Save	Ctrl+S
Save As...	Ctrl+Shift+S
Page Setup	Ctrl+Shift+P
Print	Ctrl+P
Preferences	Ctrl+Comma
Quit	Ctrl+Q

- Edit :→ when we click on the edit button on the Menu Bar, a drop down list appear. It is shown below :→

Date.....

Edit	
undo	Ctrl+Z
Redo	Ctrl+Y
Cut	Ctrl+X
Copy	Ctrl+C
Copy for Forum	Ctrl+Shift+C
Copy as HTML	Ctrl+Alt+C
Paste	Ctrl+V
Select all	Ctrl+A
Go to line...	Ctrl+L
Comment/uncomment	Ctrl+Slash
Increase Indent	Tab
Decrease Indent	Shift+Tab
Increase Font Size	Ctrl+Plus
Decrease Font Size	Ctrl+Minus
Find...	Ctrl+F
Find Next	Ctrl+G
Find Previous	Ctrl+Shift+G.

- Sketch :- When we click on the Sketch button on the Menu Bar, a drop-down list appear. It is shown below :⇒

Sketch	
Verify/Compile	Ctrl+R
Upload	Ctrl+U
Upload using programmer	Ctrl+Shift+U
Export Compiled Binary	Ctrl+Alt+S
Show Sketch Folder	Ctrl+K
Include Library	
Add File...	

Teacher's Sign.....

Date.....

- **Tools** :→ when we click on the Tools button on the Menu bar, a drop-down list appear. It shown below :→

Tools	
Add Format	Ctrl+T
Archive Sketch	
Fix Encoding and Reload	
Manage Libraries...	Ctrl+Shift+I
Serial Monitor	Ctrl+Shift+M
Serial Plotter	Ctrl+Shift+L
WiFi 101 / WiFiNINA Firmware updater	
Board: "Arduino Pro or Pro Mini"	>
Processor: "ATmega 328P (5V, 16MHz)"	>
Port	>
Get Board info	
Programmer: "AVRISP mkII"	>
Burn Bootloader	

- **Help** :→ when we click on the Help button on the menu bar, a drop-down list appear. It shown below :→

Help	
Getting started	
Environment	
Troubleshooting	
Reference	
Find the Reference	Ctrl+Shift+F
Frequently Asked Ques.	
Visit Arduino.cc	
About Arduino	

Teacher's Sign.....