**Quick Setup Guide: GitHub, Python IDLE, PyCharm, VirtualBox, and Kali Linux**

1. **Open a GitHub Account**

* Go to https://github.com
* Click Sign Up, enter your email, username & password.
* Verify email → account is ready.

2. **Install Python (with IDLE)**

* Go to https://www.python.org/downloads
* Click Download Python (latest version).
* Run installer → check “Add Python to PATH” → Install Now.
* When prompted, click Disable path length limit.

Note: Confirm installation in Command Prompt:

**python --version**

3. **Install PyCharm (Community Edition)**

**To Create a directory (in Documents) and virtual environment:**

* Right-click on the Documents folder
* Select “Copy as path”
* Win + R keys on your keyboard and type cmd
* Hit “Enter”
* In the command window prompt:  
   **cd <Path you copied>**

**To create a project directory:**

* mkdir myproject
* cd myproject
* python -m venv venv

**Enter/Activate virtual environment**

* cd venv/Scripts
* activate

Go to <https://download.jetbrains.com/python/pycharm-community-2025.2.2.exe>

Download and install Community Edition.

OR  
<https://pycharm-community-edition.en.softonic.com/download?installerType=riseInstaller>

4. **Open Directory as PyCharm Project**

* Open PyCharm → click Open.
* Select the myproject folder.
* Right-click project → New → Python File → name it “foundations”

Test code:

**print("Hello, PyCharm!")**

Run the file.

5. **Install Oracle VirtualBox (Windows 10)**

* Go to https://www.virtualbox.org
* .Click Downloads → Windows hosts.
* Run installer → accept defaults → finish installation.

**Download Kali Linux (VirtualBox image)**

* Go to <https://www.kali.org/get-kali> → Virtual Machines → choose VirtualBox (64-bit).
* Download the .7z archive (this contains the VM files, typically a .vmdk and metadata).
* Extract the .7z (use 7-Zip: right-click → 7-Zip → Extract Here, or 7z x filename.7z).
* After extraction you should see the .vmdk (virtual disk) and maybe an .ovf/.mf. (If you get an .ova, use File → Import Appliance instead.)

7. **Install Kali into VirtualBox (concise setup phase)**

* Open VirtualBox → click New (or the + icon).
* Name: KaliBox
* Type: Linux
* Version: Debian (64-bit)
* Memory: assign ≥ 2048 MB (4096 MB if available).
* Hard disk: choose Use an existing virtual hard disk file → Choose → select the extracted .vmdk.
* Finish creating the VM.

First Boot — install/enable Network Manager

Start KaliBox.

Log in (kali (username) and kali (password)).

Open a terminal and run (this ensures network manager is present and running):

**sudo apt update && sudo apt install -y network-manager**

**sudo systemctl enable --now NetworkManager**

* Confirm NetworkManager status:   
  **systemctl status NetworkManager** (or nmcli device status).
* Shutdown the VM cleanly: sudo shutdown -h now (or via the GUI).

Create Host-only Adapter (host machine)

**Method 2:**

* In VirtualBox Manager → File → Host Network Manager.
* Click Create (this makes a host-only adapter, usually named vboxnet0).
* (Optional) Check IPv4: e.g., 192.168.56.1 and enable DHCP if you want automatic addressing.

OR   
**Method 2:**

* Using Tools → Preferences → Network
* In VirtualBox Manager, go to Tools → Preferences.
* Select Network from the left menu.
* Under Host-only Networks, click the + icon to add a new one.
* Configure IPv4/DHCP as needed.

**Create NAT Network named cyberlabs**

* VirtualBox Manager → File → Preferences → Network → NAT Networks.
* Click + (Add), then Edit the new NAT Network and name it cyberlabs.

Leave defaults or set a CIDR (example 10.0.3.0/24) if you need a specific range.

Attach Adapters to KaliBox

Select KaliBox → Settings → Network.

**Adapter 1:**

* Enable → Attached to: Host-only Adapter → Name: select vboxnet0 (or the host-only you created).

**Adapter 2:**

* Enable → Attached to: NAT Network → Name: select cyberlabs.
* Save settings.

8. **Download and install DB BROWSER SQLITE**

Open your browser and go to DB Browser for SQLite download page (look for DB Browser for SQLite / sqlitebrowser).

* Download the Windows installer (MSI) for the latest stable release.
* Run the downloaded .msi file.
* Follow the installer prompts (Accept license → Next → Install).
* After install, open Start → DB Browser for SQLite.

9. **Install Ngrok**

Windows

<https://ngrok.com/download/windows?tab=download>

OR Go to <https://bin.equinox.io/c/bNyj1mQVY4c/ngrok-v3-stable-windows-amd64.zip>

Linux

Download link: <https://bin.equinox.io/c/bNyj1mQVY4c/ngrok-v3-stable-linux-amd64.tgz>

**On the terminal**  
wget <https://bin.equinox.io/c/bNyj1mQVY4c/ngrok-v3-stable-linux-amd64.tgz>

* Sign Up to Ngrok’s website to get your auth keys
* sudo tar -xfz ngrok-v3-stable-linux-amd64.tgz
* mv ngrok /usr/local/bin
* ngrok config add-authtoken <token>