**Different ways to install Linux on Windows**

**Option 1: "Dual-boot"**

With dual boot, you can install Linux alongside Windows on your computer, allowing you to choose which operating system to use at startup.

This requires partitioning your hard drive and installing Linux on a separate partition. With this approach, you can only use one operating system at a time.

## Option 2: Use Windows Subsystem for Linux (WSL)

Windows Subsystem for Linux provides a compatibility layer that lets you run Linux binary executables natively on Windows.

Using WSL has some advantages:

* The setup for WSL is simple and not time consuming.
* It is lightweight compared to VMs where you have to allocate resources from the host machine.
* You don't need to install any ISO or virtual disc image for Linux machines which tend to be heavy files.
* You can use Windows and Linux side by side.

**Option 3: Use a Virtual Machine (VM)**

A virtual machine (VM) is a software emulation of a physical computer system. It allows you to run multiple operating systems and applications on a single physical machine simultaneously. Here's a detailed explanation of VMs:

You can use virtualization software such as Oracle VirtualBox or VMware to create a virtual machine running Linux within your Windows environment. This allows you to run Linux as a guest operating system alongside Windows.

VM software provides options to allocate and manage hardware resources for each VM, including CPU cores, memory, disk space, and network bandwidth. You can adjust these allocations based on the requirements of the guest operating systems and applications.

Here are some of the options available for virtualization:

* Oracle virtual box
* Multipass
* VMware workstation player