How to install and use VirtualBox on Windows 10

- 1. Download VirtualBox, Choose "Windows hosts" <u>https://www.virtualbox.org/wiki/Downloads</u>
 - a. You can watch this YouTube video for reference <u>https://www.youtube.com/watch?v=8mns5yqMfZk</u>
- Find and download the iso file you'd use, e.g., ubuntu. Following this link to download an *.iso file, which is a CD image, e.g., "ubuntu-20.04-desktop-amd64.iso" Usually you'd pick the LTS (Long Term Support) version. The .iso file is very large, 2.6 GB for version 20.04. So it may take some time to download it.

https://ubuntu.com/download/desktop

You might consider to save this iso file in a folder that has all your VMs, e.g., **c:\users\your name\VirtualBox** so it is easier to retrieve them later.

3. Set up and boot from an iso (optical disk image) file

Oracle VM - How To Load and Boot from ISO - VirtualBox

https://www.youtube.com/watch?v=KZ_uqCtgaKI

In this process, the key is to set the "storage" option to tell VM to boot from the *.iso file you downloaded from step 2.

You will have an option to specify the amount of memory and the disk space for the VM. In general, take the default of 1 GB memory (1024 MB) and 10 GB disk should work for most. If you plan to use more than gcc or Makefile, it may be a good idea to set the disk space to be 20 GB.

- 4. Start the VM with the newly installed boot CD, e.g., ubuntu to set up the ubuntu system on your VM. The installation may take some time ...
 - a. Follow the installation instructions, take mostly default options.
 - b. One of the "warnings" you'd receive during installation is that the process would "erase" the current disk. You should answer "yes" because the VM installation will "erase" the virtual disk you allocated to the VM, which is a part of your physical disk, not the boot sector of your physical disk. In another word, this "erase" will just use up a portion of your disk, not "erase" any existing content.
- 5. The bare system (in this ubuntu Linux) doesn't have any developer's software such as gcc or Make installed. You'd have to install them yourself. But ubuntu makes the process very simple. You just start to use what you need, e.g., gcc. If a package is not on the system, ubuntu will suggest the command to install, e.g.,

sudo apt install gcc

which will install the gcc package for you.