

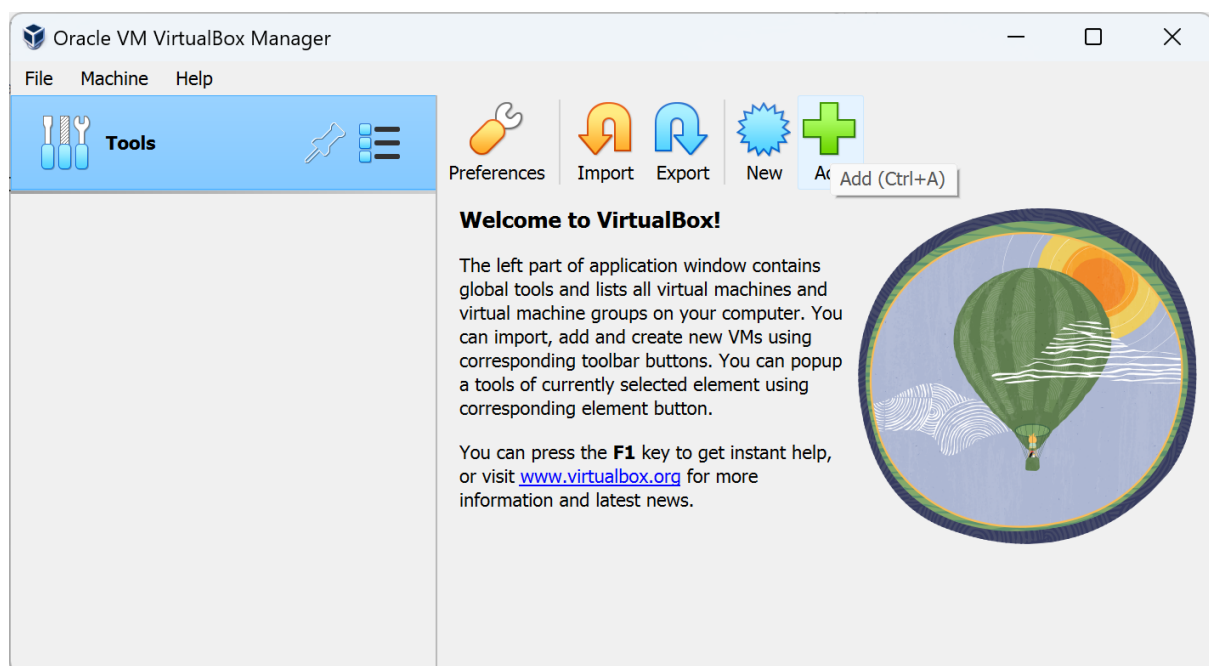
# 01 - Installation of Virtual Machine for the Project

VM Download Link: <https://tinyurl.com/CSE331VM>

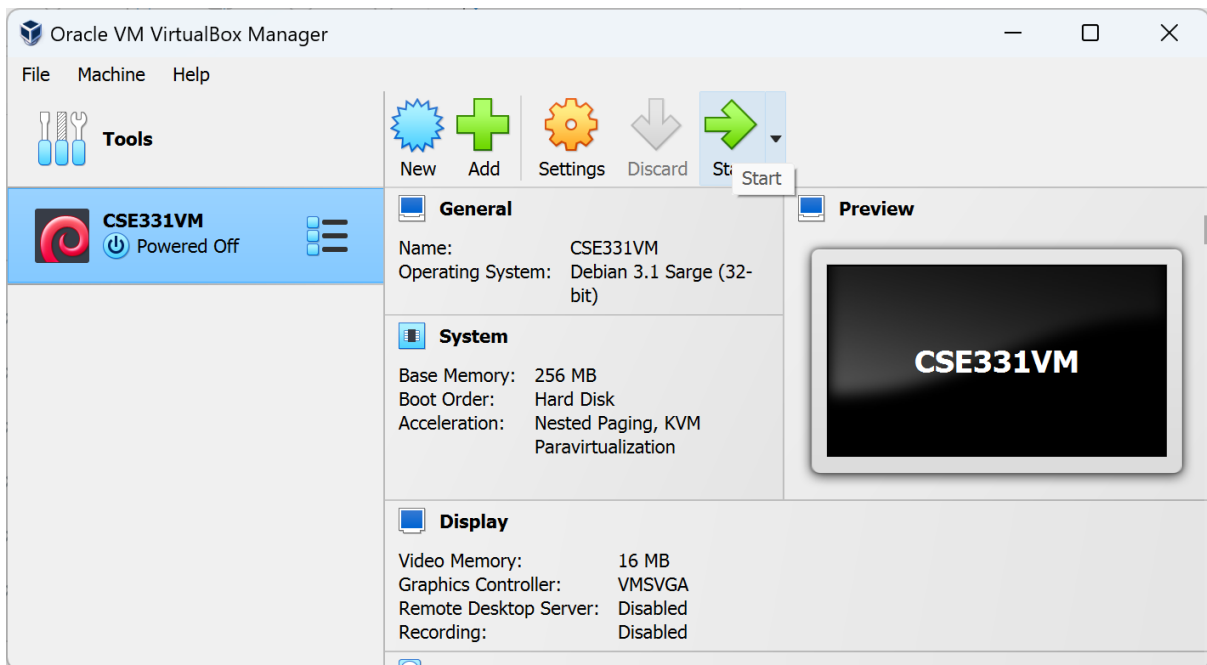
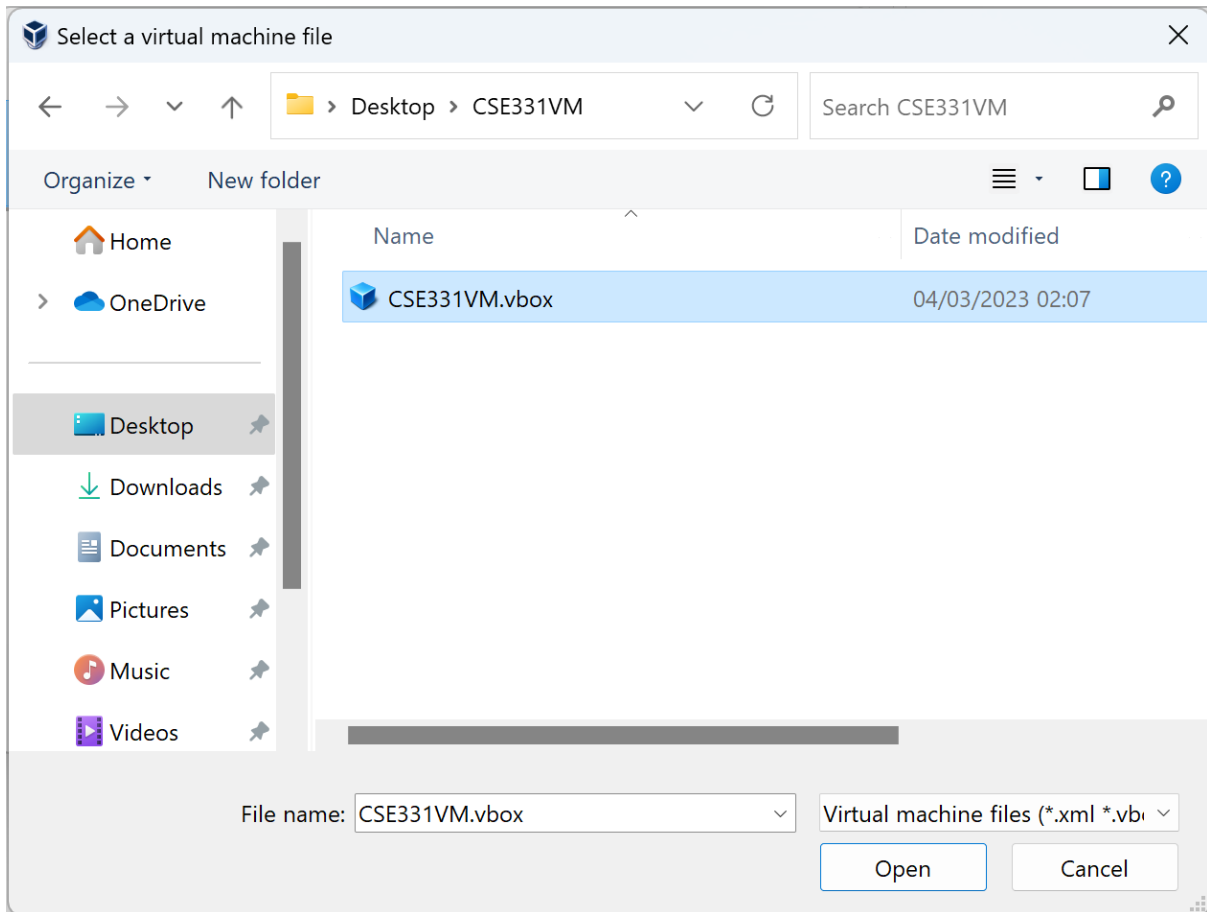
Full Link: <https://drive.google.com/file/d/1hrOVbML-6cyxK0zPp4TH4J7AyDqVLMgb>

## Intel processor instructions

If you are using an Intel-based computer, whether Windows, Linux or Mac. You can download Virtualbox according to your OS, from <https://www.virtualbox.org/wiki/Downloads> page.



Extract the downloaded CSE331VM.zip file. Then, in VirtualBox, use the "Add" button to select the .vbox file from the extracted folder.



## AMD or M1/M2 Macs

If you are using an AMD processor or new M1/M2 Macs, then you should use QEMU to use emulation instead of virtualization software.

For AMD, using Windows, you can follow this guide (You can ignore “How to make a machine in QEMU” part):

<https://linuxhint.com/gemu-windows/>

For AMD, using Ubuntu derivatives, you can follow this guide **from Step 2**:

<https://www.tecmint.com/install-qemu-kvm-ubuntu-create-virtual-machines/#:~:text=Step%202%3A%20Install%20QEMU/KVM%20on%20Ubuntu%2020.04/22.04>

For M1/M2 Macs:

1. You should first download Xcode Command Line tools. So open a Terminal and type “xcode-select --install” and follow on-screen instructions.
2. Then, you can download Homebrew from <https://brew.sh> website.
3. Use the “brew install qemu” command to install QEMU emulation software.

The command to run QEMU emulation is as follows;

1. First, you should extract the CSE331VM.zip file in a location.
2. Use the “cd” command to navigate to the directory using Terminal
3. Run this command for Linux/Mac;

```
qemu-system-i386 -nodefaults -smp cores=1 -m 256 -vga std -net nic -net user,hostfwd=tcp::2222-:22 -drive media=disk,file=CSE331VM.vdi
```

4. Run this command for AMD Windows;

```
qemu-system-i386.exe -nodefaults -smp cores=1 -m 256 -vga std -net nic -net user,hostfwd=tcp::2222-:22 -drive media=disk,file=CSE331VM.vdi
```

5. You should allow any prompts by saying yes, if asked.