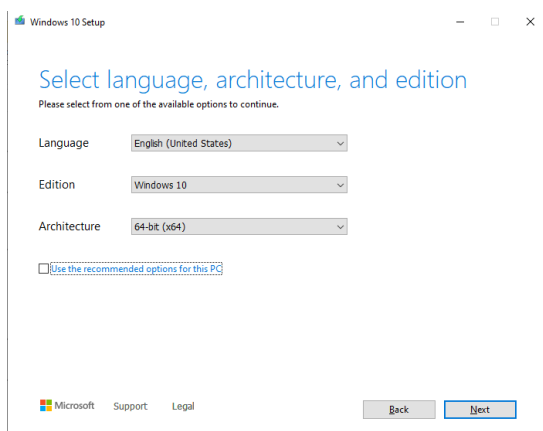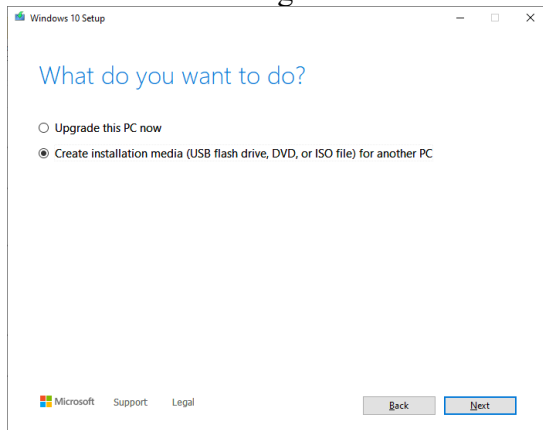# Create a Windows VM using Oracle VM VirtualBox

The purpose of this assignment is to install the type 2 hypervisor Oracle VM VirtualBox and create a Windows 10 VM.

You can download the VirtualBox binaries from https://www.virtualbox.org/ VirtualBox can be installed on Windows 10, MacOS (M1 processor will not work), and certain Linux distros.
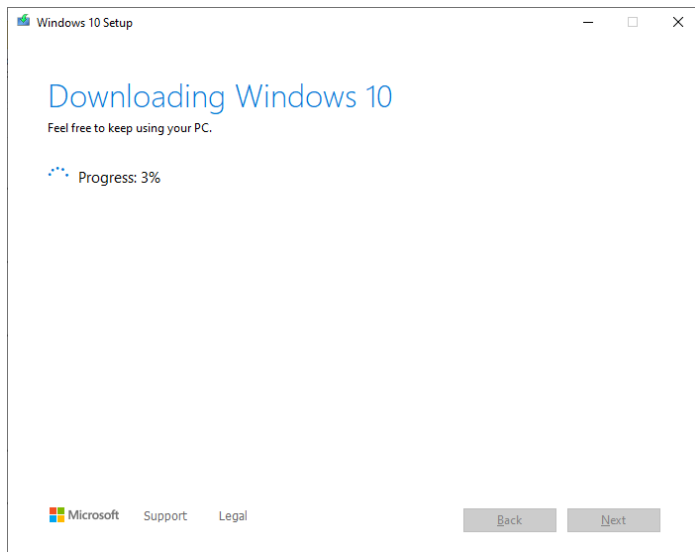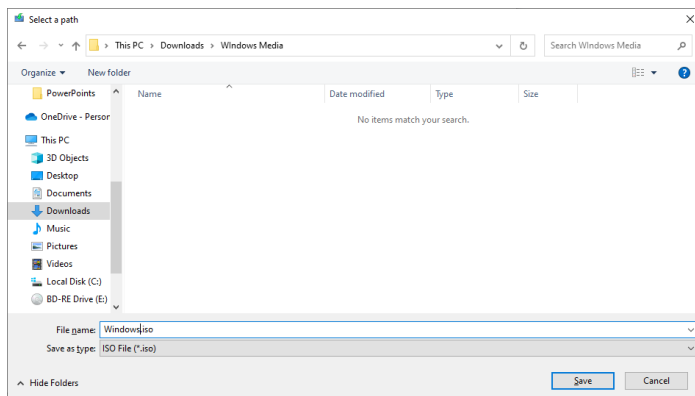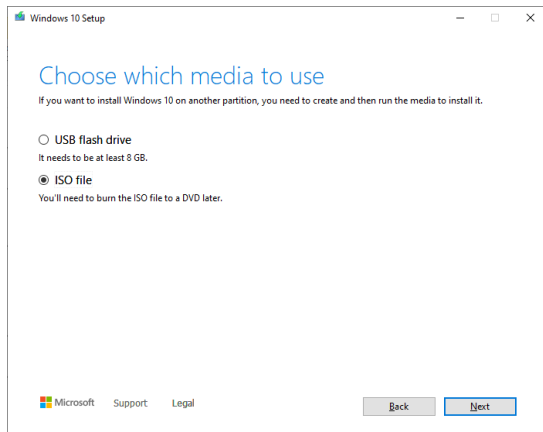
To create a Windows 10 VM within Oracle VirtualBox VM Manager. You will create a Windows 10 VM using an .iso file. To obtain the .iso file you will use the "Windows 10 installation media" tool, which can be found from the following URL:

https://www.microsoft.com/en-us/software-download/windows10

Reference the images below for assistance in creating the Windows 10 .iso file:

Create a Windows VM using Oracle VM VirtualBox

Note: *"Windows 10 installation media" tool does not run on MacOS or Linux distros, therefore if you do not have access to a Windows PC you will need to download the .iso file directly from the following URL:*
https://pitt-my.sharepoint.com/:u:/g/personal/smb284_pitt_edu/EdSSfJcPBexFoH03SbNnOZ8B_SfeXa5g5pSlkkIuO07K8Q?e=scTMpx

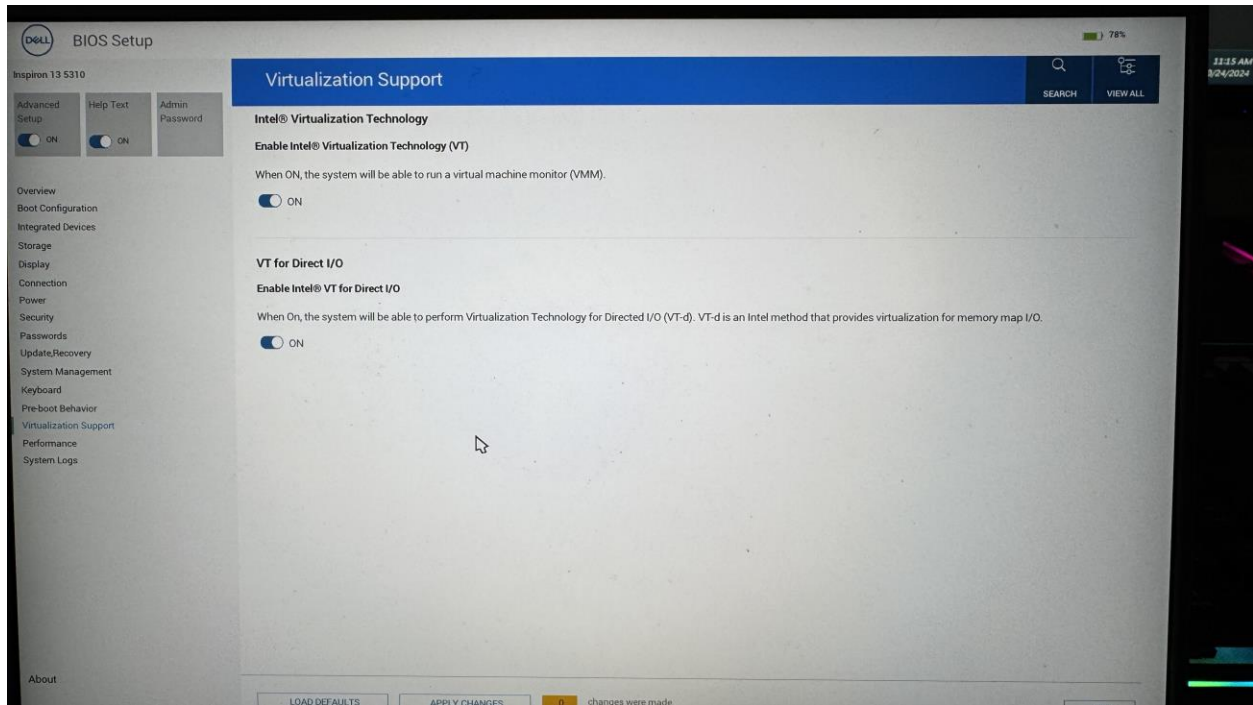# Create a Windows VM using Oracle VM VirtualBox

To receive full credit, you must answer the following questions as well as document and provide screenshots showing your steps:

1. (20 points). Before installing Oracle VM VirtualBox ensure your computer BIOS / UEFI has the appropriate settings enabled for hardware virtualization. Settings names differ based on motherboard manufacture and CPU used, but you will want to look for an option similar to the screenshot below.

Provide an image(s) showing the setting(s).
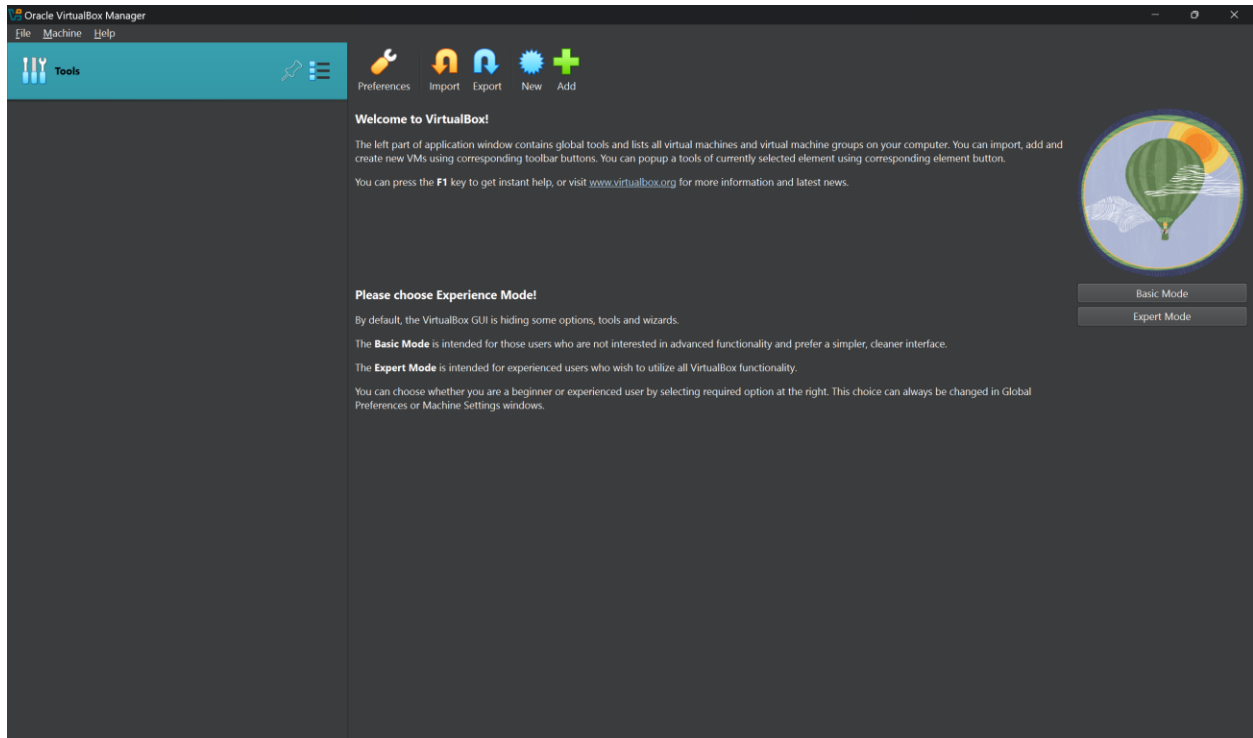
Create a Windows VM using Oracle VM VirtualBox

Note: Apple Mac hardware does not allow you to see these settings and has CPU Virtualization enabled by default on all Mac hardware with compatible CPUs. Therefore, if you are going to install Oracle VM VirtualBox Manager on MacOS, simply take a picture of your Mac hardware (i.e. MacBook, MacPro, etc.) to answer this question.
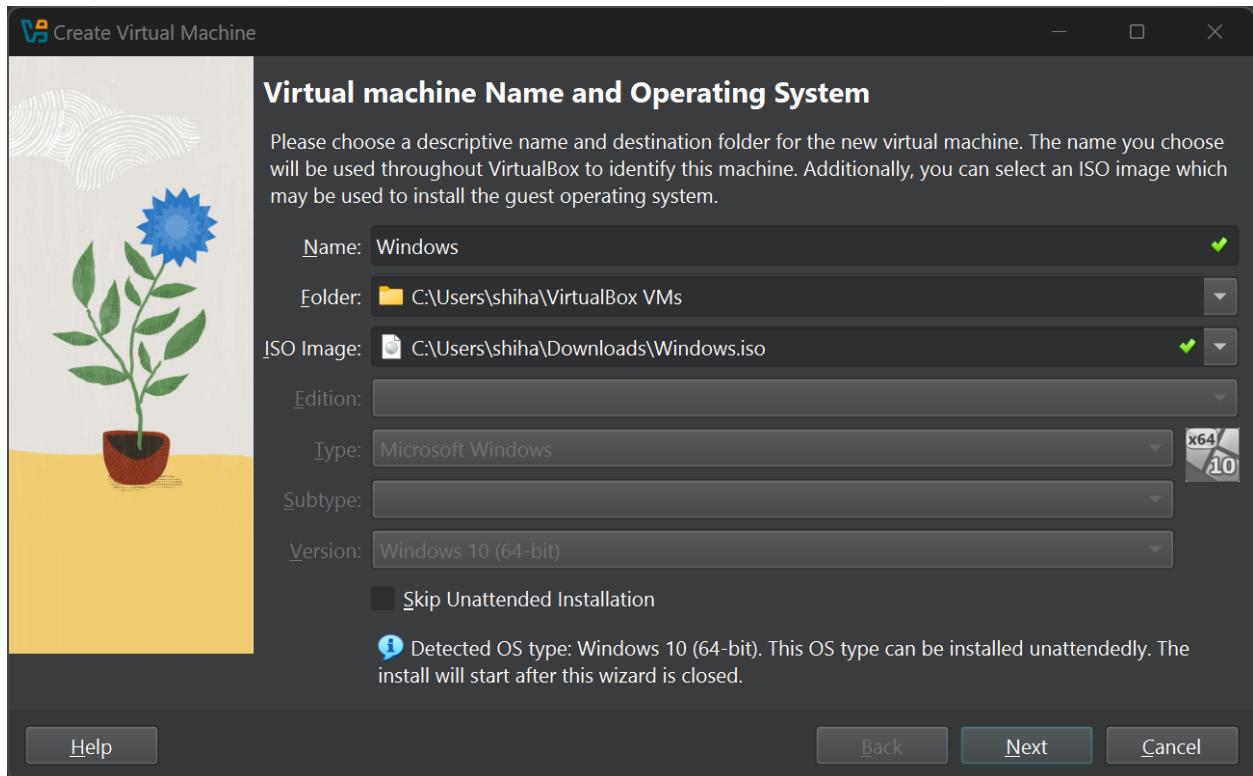
2. (20 points). Install Oracle VM VirtualBox on your computer (remember to provide a few screenshots showing the installation).

I've already installed it in the first week of the Fall semester. Therefore, I only have the installed application, not the steps.

Create a Windows VM using Oracle VM VirtualBox

3. (10 points). Create the first Windows 10 VM using the .ISO file naming the VM "Windows"

Create a Windows VM using Oracle VM VirtualBox

4. (6 points). What are the default settings for CPU, memory, and hard disk size?

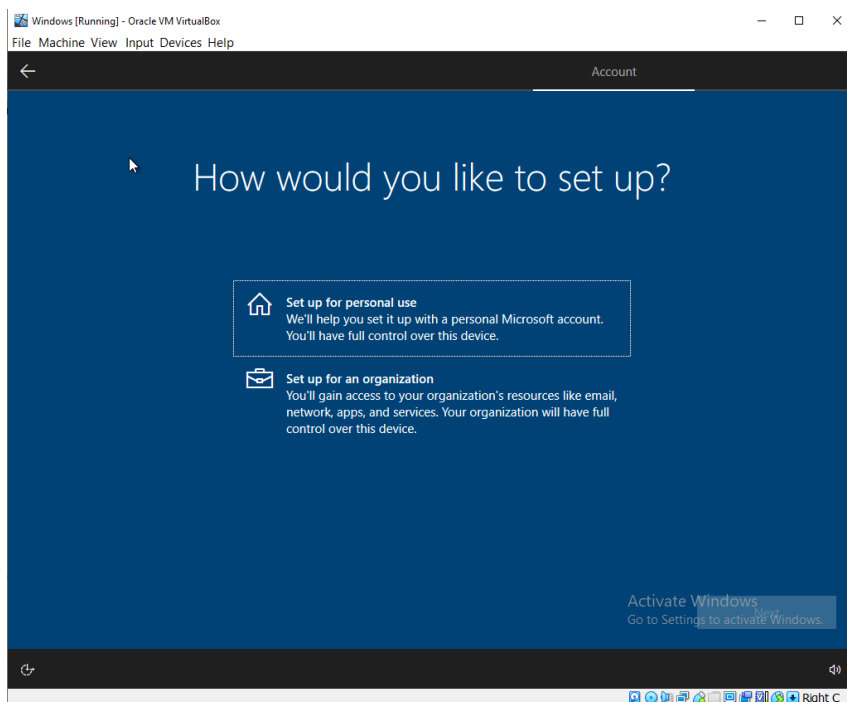**5. (4 points). Attach the Windows.iso file to your virtual optical drive.**

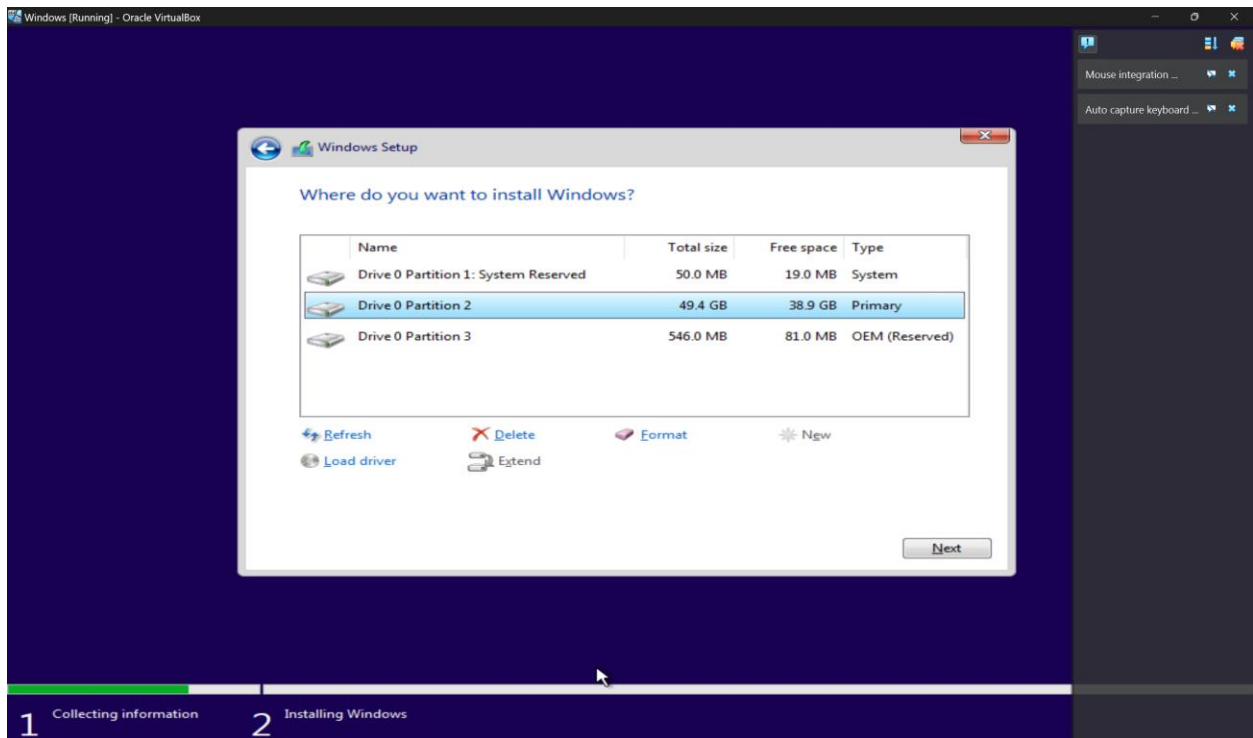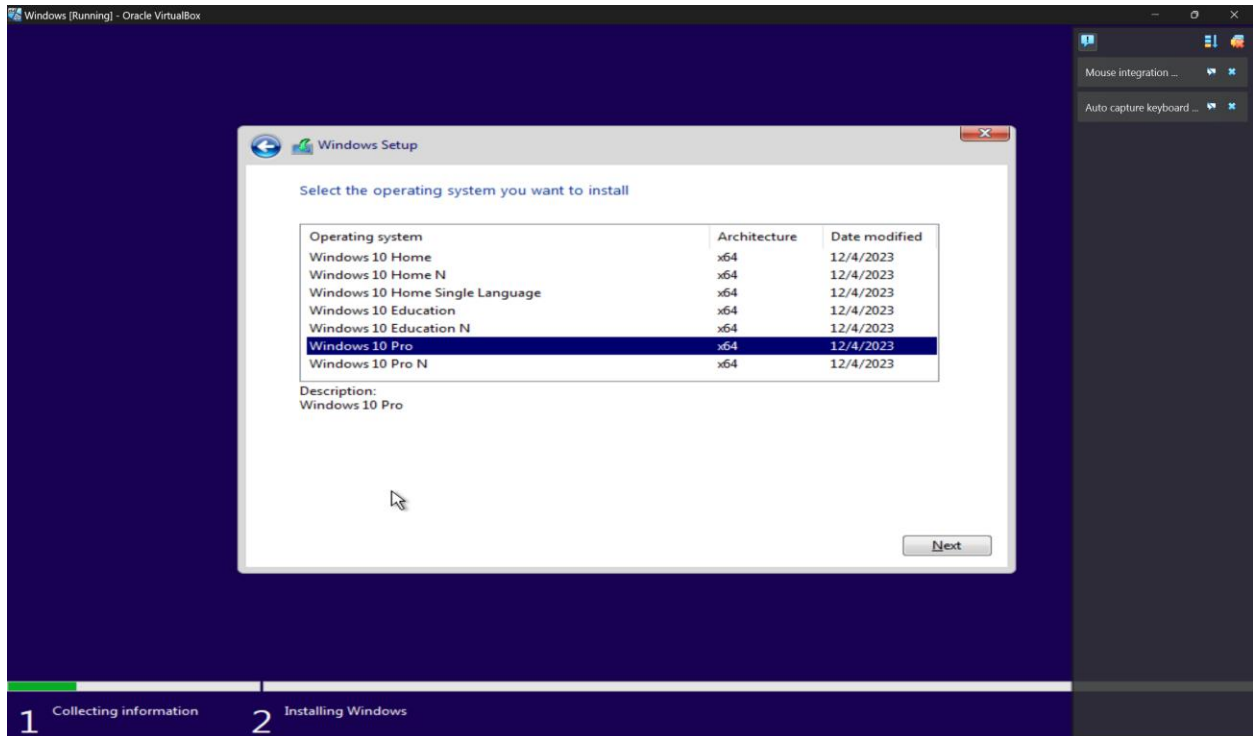# Create a Windows VM using Oracle VM VirtualBox

6A. (10 points). Start / Power-On your VM and begin performing the OS installation. During the installation you will be asked to enter a product key, you can skip this step and provide a product key later. Select Windows 10 Pro for your license type. Toward the end of the setup, you'll be asked "how would you like to set up?", you will want to select "Set up for personal use", as shown below:
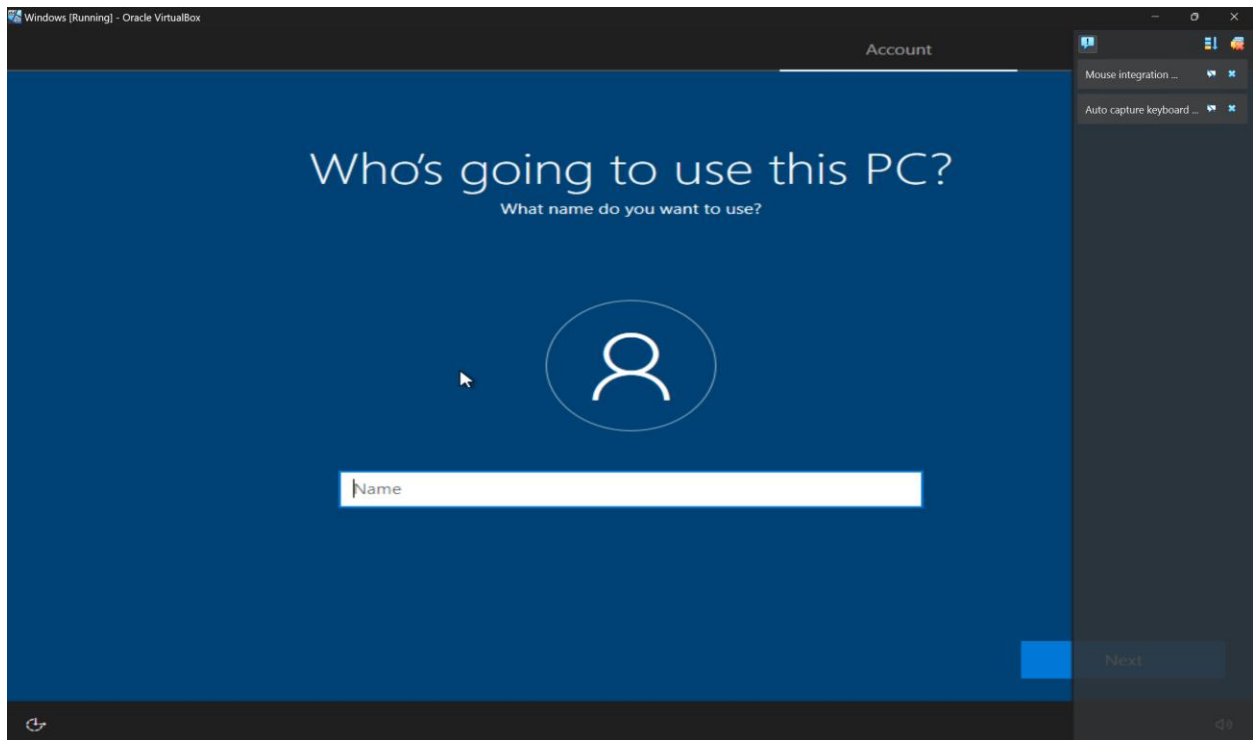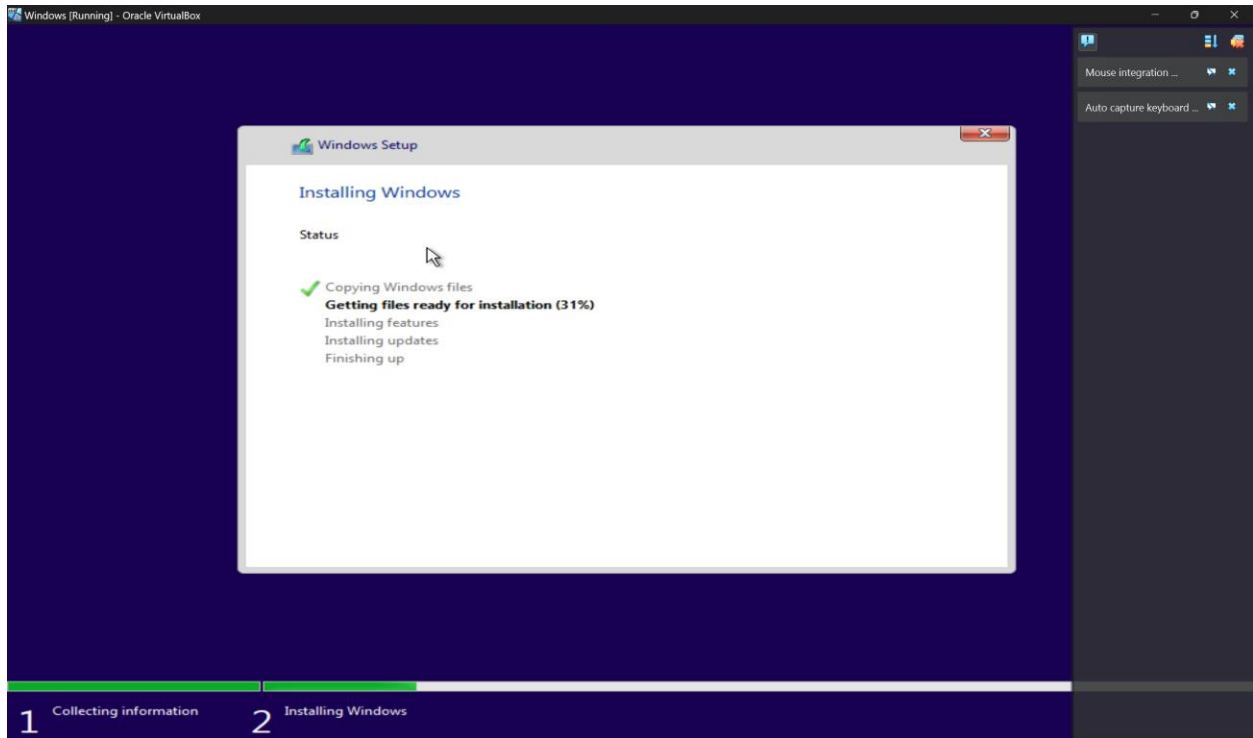

Provide screenshots of the installation; be sure to include images showing the creation of the partition(s) and formatting.
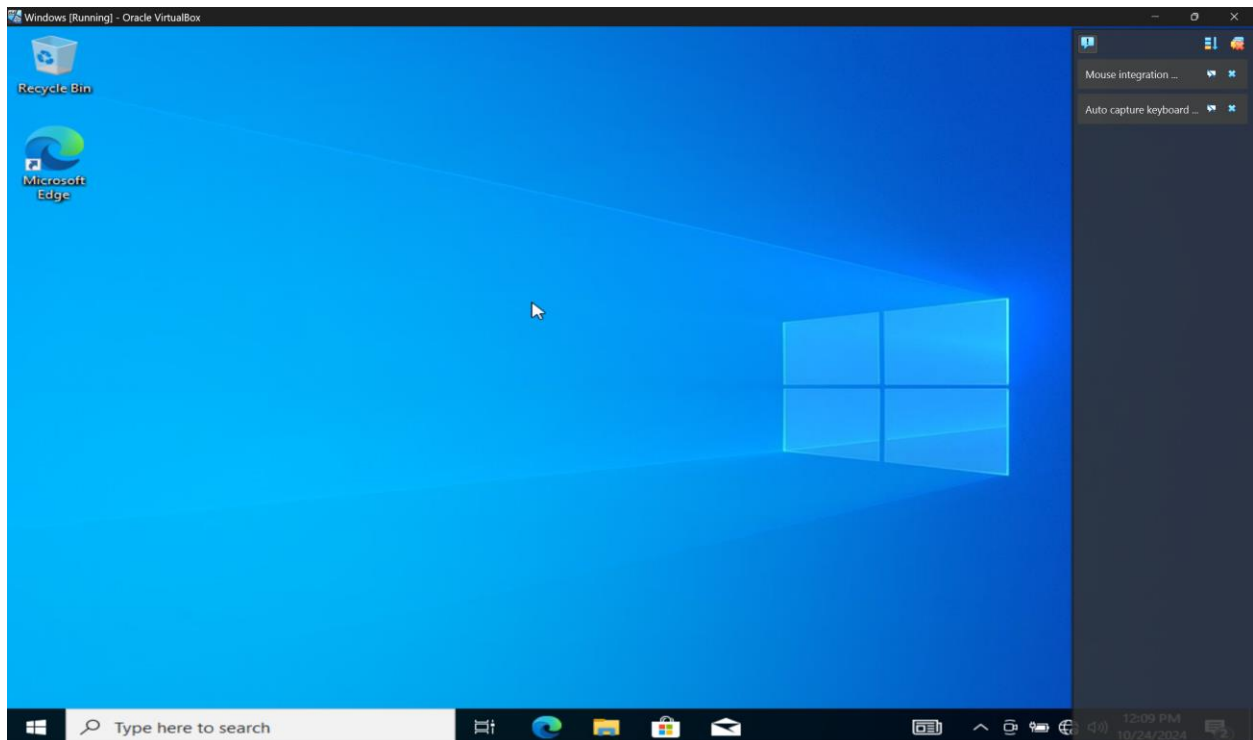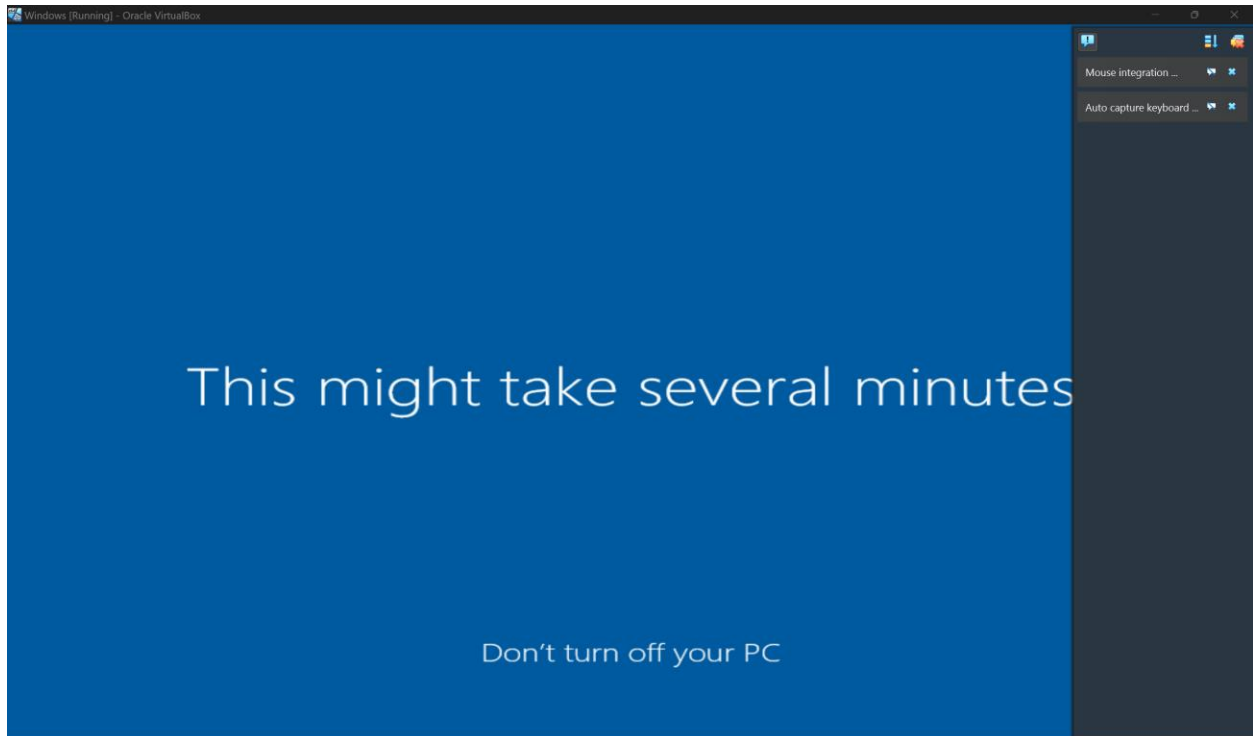
Create a Windows VM using Oracle VM VirtualBox

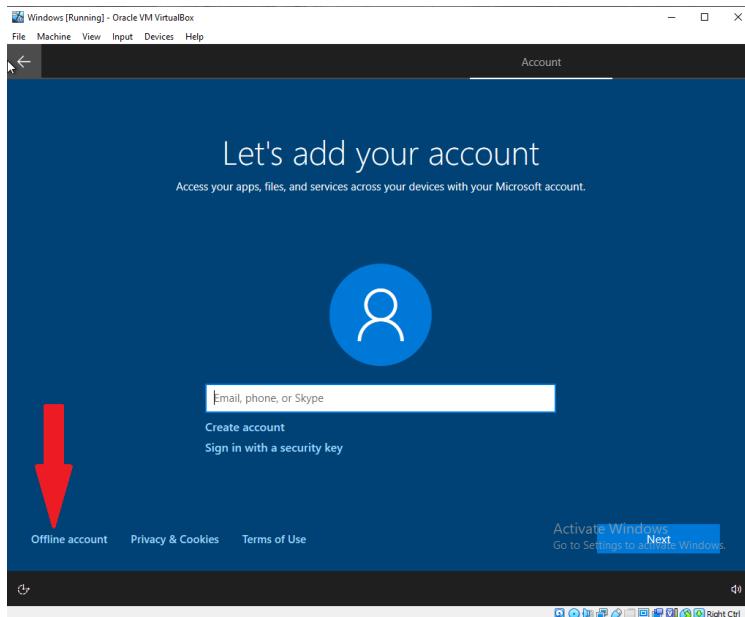# Create a Windows VM using Oracle VM VirtualBox

Create a Windows VM using Oracle VM VirtualBox

6B. (10 points). During the installation process set up an "Offline account". What is the difference between an offline account and a Microsoft account? Are you required to enter a password for an offline account?

Create a Windows VM using Oracle VM VirtualBox

Both offline accounts and Microsoft accounts can be used on Windows 10, but they serve different purposes and have varying requirements. The main difference is that offline accounts are for local use without internet access, while Microsoft accounts provide access to Microsoft services and require an internet connection. Since it is also a Microsoft product, both types of accounts require a password for security.
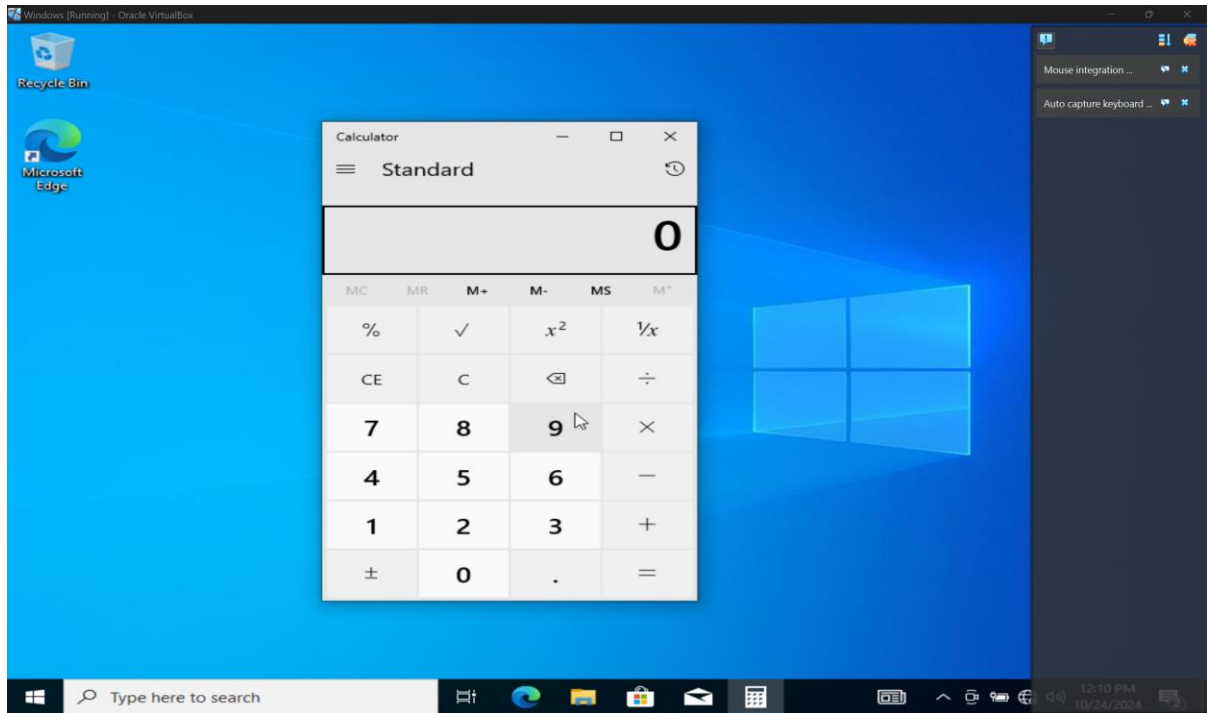

(It never asked me if I want to create an offline account)
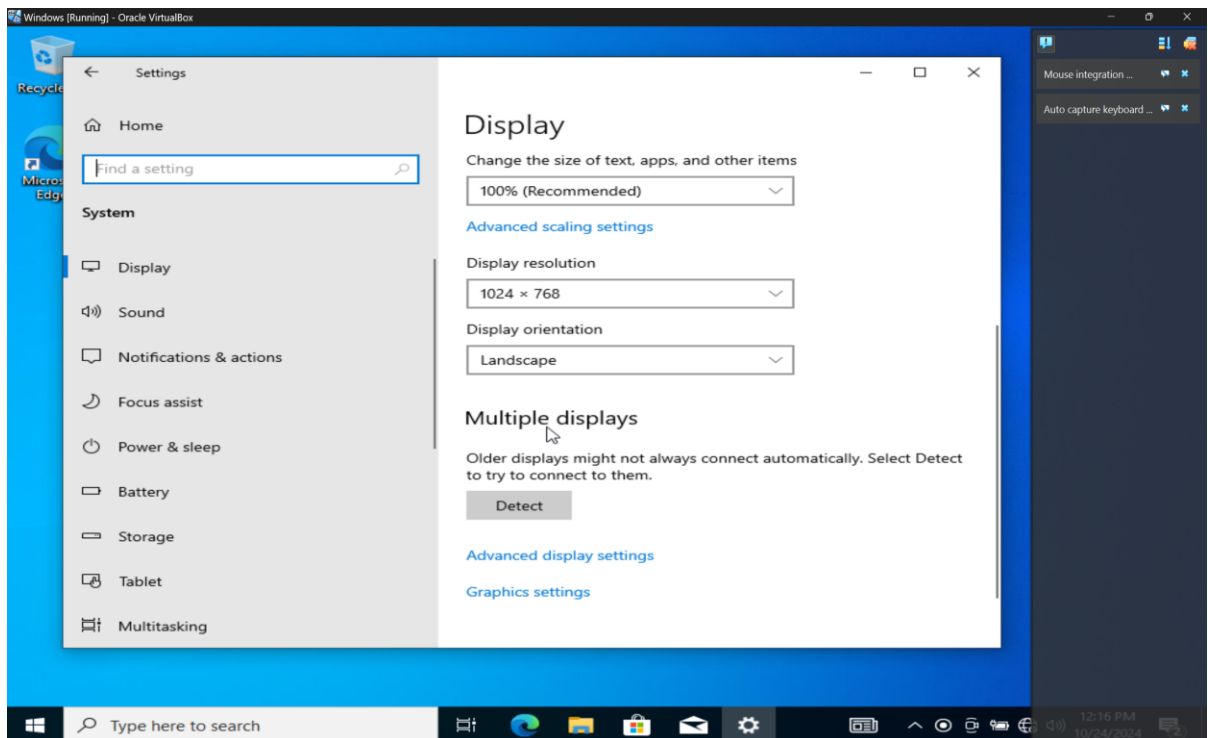
6C. (20 points). Once the Windows 10 OS installation has completed provide screenshots showing the following:

- Windows application calculator running within your VM
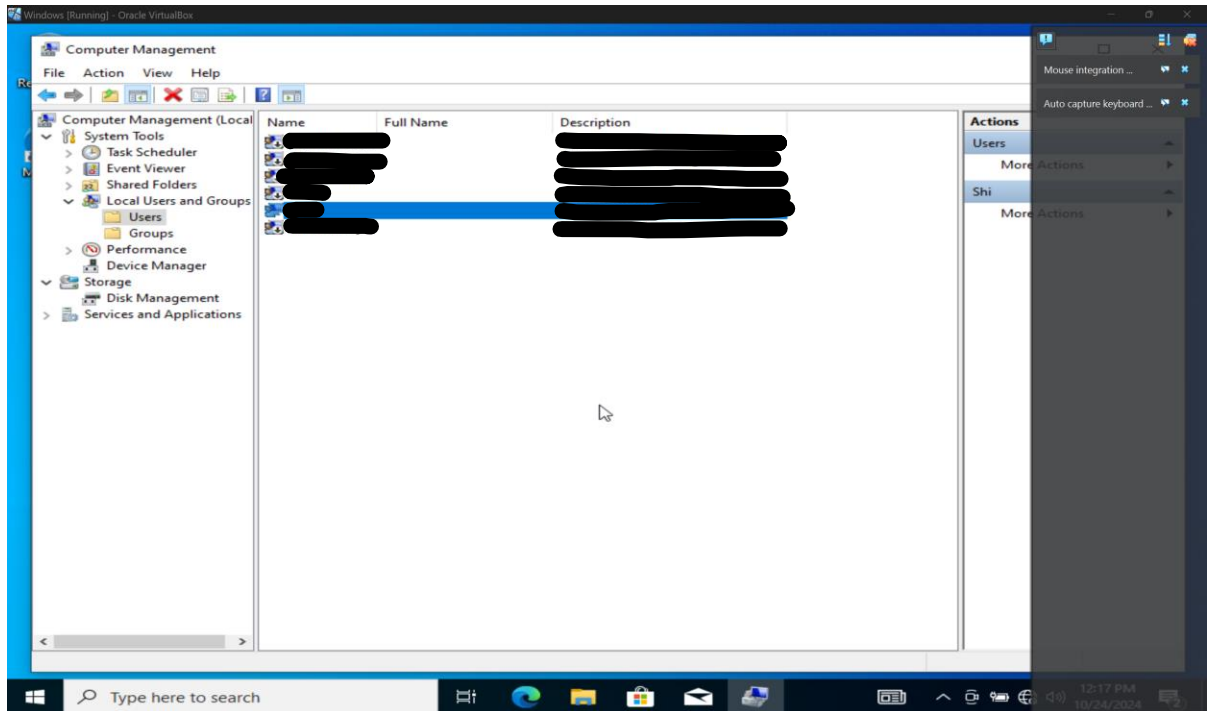
Create a Windows VM using Oracle VM VirtualBox

- Windows display resolution setting (ie. 800x600)
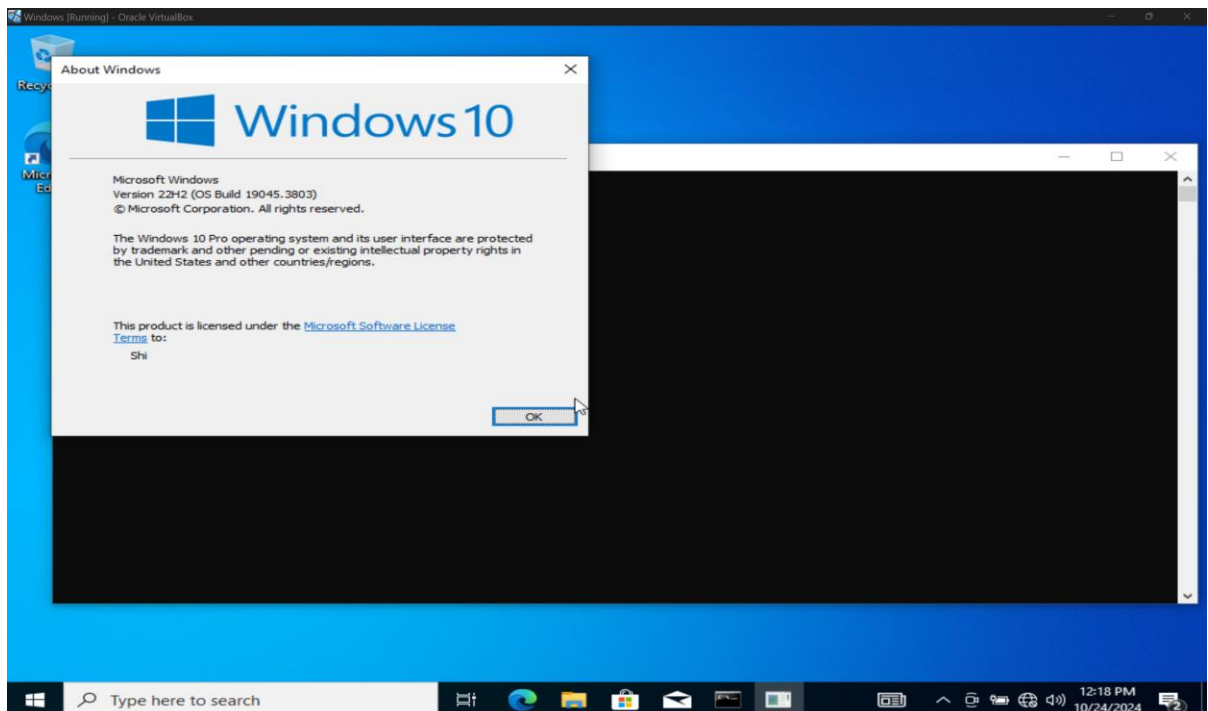

- Current local users (Hint: Computer Management)
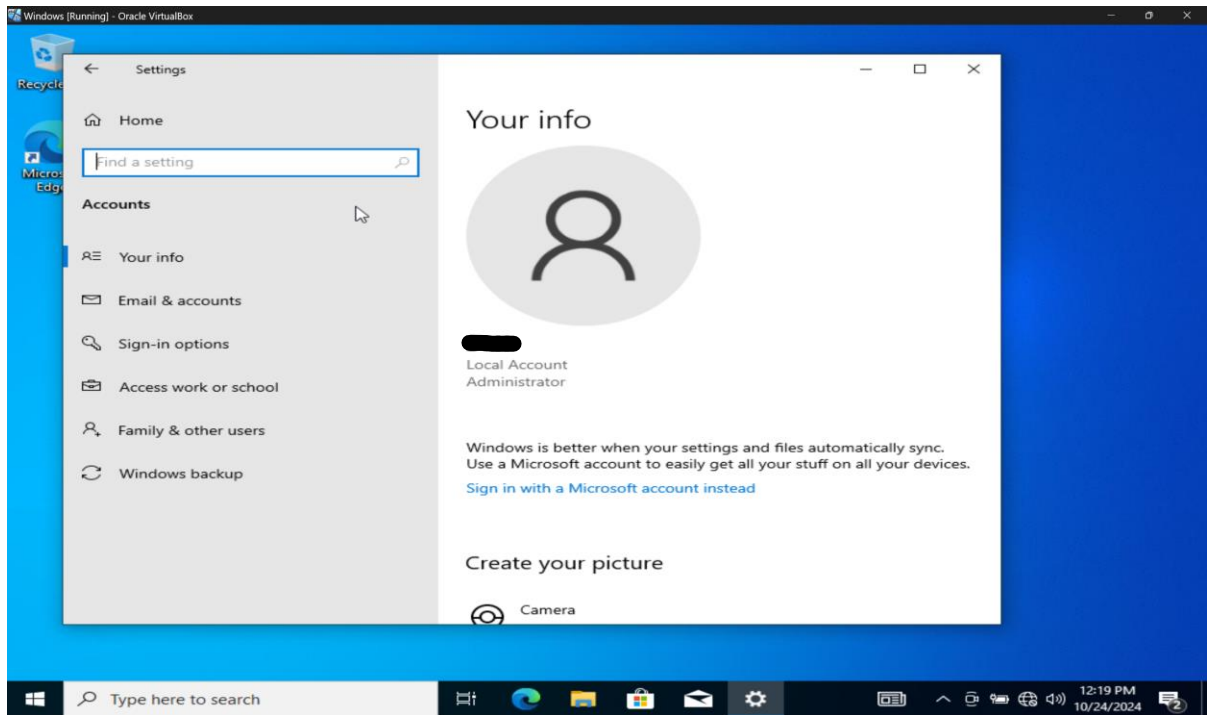
Create a Windows VM using Oracle VM VirtualBox

- Windows Version (Hint: cmd winver)

- Current User Account Control Settings

Create a Windows VM using Oracle VM VirtualBox

NOTE: Ensure your Windows installation is happening in your VM and not on your actual computer, as doing so could destroy all the data on your computer. Keep this VM as we will use it for future assignment(s).