

Notes: Please read carefully before proceeding.

(1) Installation of the VMware Workstation Player will likely require you to restart your computer. Take time now to close any open programs and / or logout of any websites.

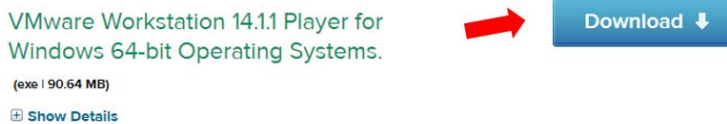
(2) Some of the graphics in this setup guide might show version numbers that differ slightly from what you see on screen. For example: a graphic in this handout might show version 14.11, but when you download the software, it will actually be version 14.12. This is normal and will have no impact on the installation of your virtual machine.

(3) You will be asked to type a series of commands in your virtual machine. All commands are case-sensitive. That means uppercase is different than lowercase. For example: "ThisIsACommand" is different than "thisisacommand".

-
1. If you already have the latest VMware Player installed you can skip to step 15.
 2. Point your browser to <https://my.vmware.com/web/vmware/downloads> to download the free VMware Workstation Player software. Scroll to the bottom of the page and click on **"Download Product"** next to **"VMware Workstation Player"**

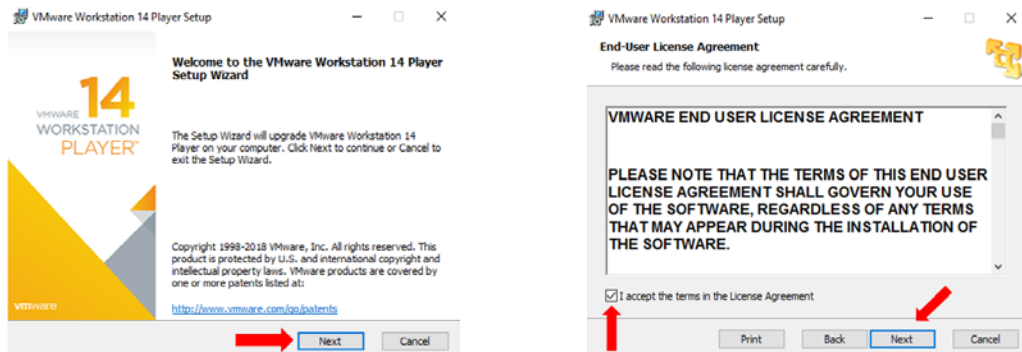


3. On the next window, click on the **"Download"** button next to the version for **"Windows 64-bit Operating Systems"**.

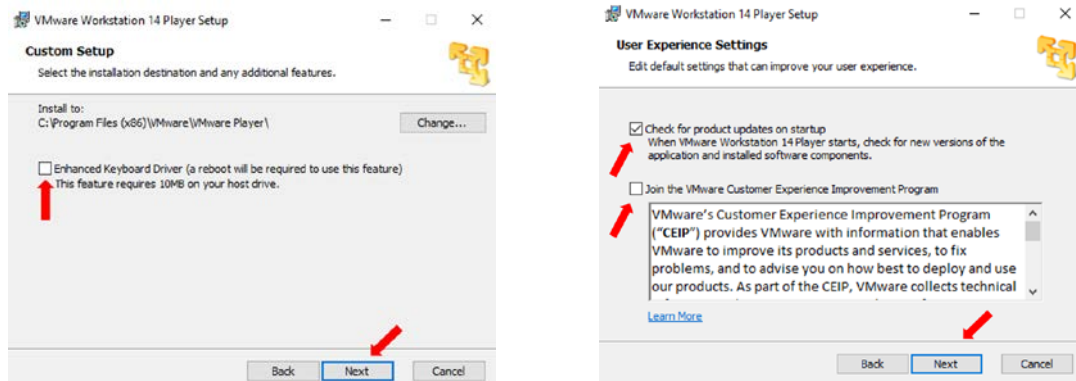


4. Save the installer to a location of your choosing. When the download is complete, Double-click on the **VMware-Player** executable to begin installation.
5. If Windows prompts you with: **"Do you want to allow this app to make changes to your device?"** Click **"Yes"**.
6. Click **"Next"** on the **"Welcome to the VMWorkstation 14 Player Setup Wizard"** screen.

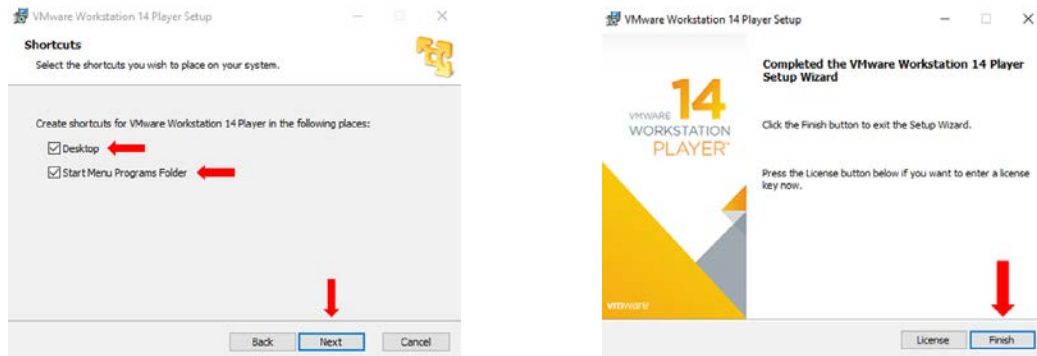
7. Tick the checkbox next to *“I accept the terms in the License Agreement.”* and click *“Next”*



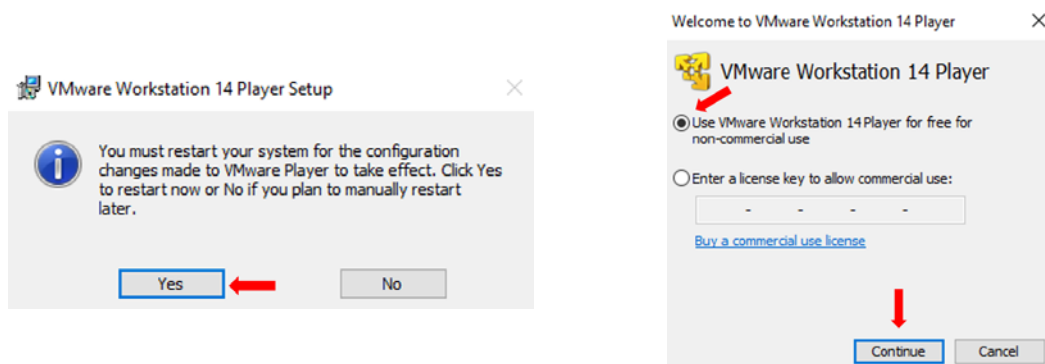
8. Make sure the *“Enhanced Keyboard Driver...”* option is unchecked, then accept the default *“Install to:”* location by clicking *“Next”*.
9. When you get to the *“User Experience Settings”* screen, make sure *“Check for product updates on startup”* is checked; and *“Join the VMWare Customer Experience Improvement Program”* is unchecked. When complete, click *“Next”*



10. When you get to the "Shortcuts" screen, leave both "*Desktop*" and "*Start Menu Programs folder*" checked and click "*Next*"
11. Click "*Install*" to install VMware Workstation Player. Once installation is complete, click "*Finish*". *Note: If you have an older version of VMware Workstation Player installed, click on "Upgrade".*



12. Once the Installation Wizard finishes, you may see a notification (like the one below, left) that you need to restart your system to complete the installation. Click "Yes" to restart your computer.
13. The first time you run VMware Workstation Player, you may be asked to choose a licensing option (like the one below, right). Select the radio button next to "Use VMware Workstation 14 Player for free for non-commercial use", then click continue.

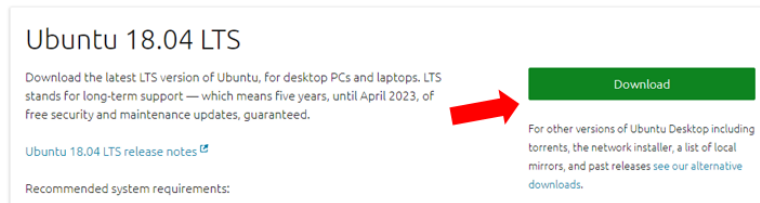


14. If you are presented with a "*Welcome To Workstation 14 Player*" window, click "*Finish*". You have now successfully installed VMware Workstation Player.

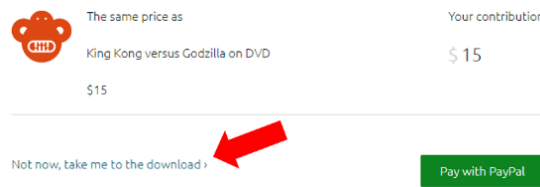
15. At this point, you should have the VMware Workstation Player software installed. If not, please return to step 1.

If you haven't already done so, download the Ubuntu Linux image file by pointing your browser to: <https://www.ubuntu.com/download/desktop>. Once there, click on the "Download" button.

Download Ubuntu Desktop



16. Scroll to the bottom of the next page and click on the "Not now, take me to the download" link.

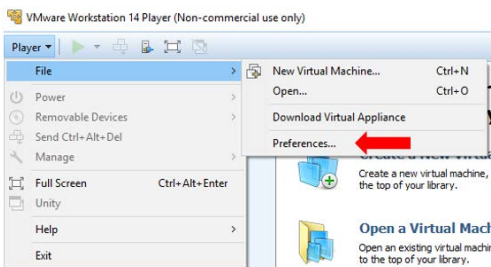


17. Your download should begin automatically and you will be given the option of where to save the Ubuntu iso file. Save the iso file to a location of your choosing, but remember where you put it (I recommend accepting the default location, which is your windows **Downloads** folder). **If the download doesn't start in a few seconds**, click on the "download now" link.

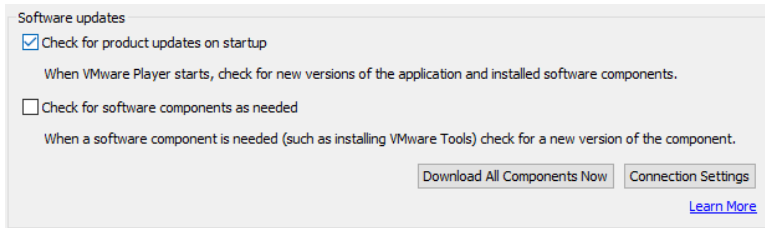
Thank you for downloading Ubuntu Desktop

Your download should start automatically. If it doesn't, [download now](#).

18. Start the VMware Workstation Player software. When you get to the startup screen, click on the "Player" menu, then select "File", then select "Preferences..."



19. Ensure "*Check for product updates on startup*" is checked and "*Check for software components as needed*" is unchecked. Click the "*Okay*" button when ready.



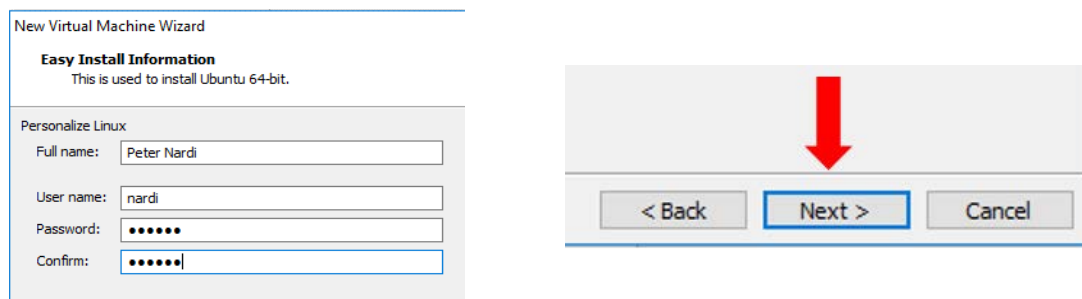
20. When you're ready to proceed, click on "*Create a New Virtual Machine*".



21. You'll be greeted by the "*New Virtual Machine Wizard*" shown below. Select the radio button labeled: "*Installer disc image file (iso):*" and click on "*Browse...*". Navigate to the Ubuntu iso you downloaded earlier and click "*Open*". Once you've selected it, you will return to this wizard. Click "*Next >*" to continue.



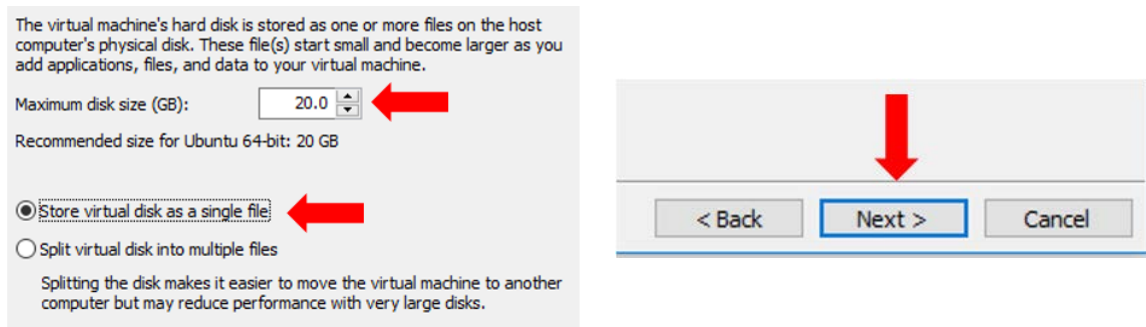
22. Personalize your Ubuntu VM on the next screen. You should use your full (real) name and your USNA login name (mXXXXXX). Avoid using spaces or special characters in your User name. Choose any password you wish.



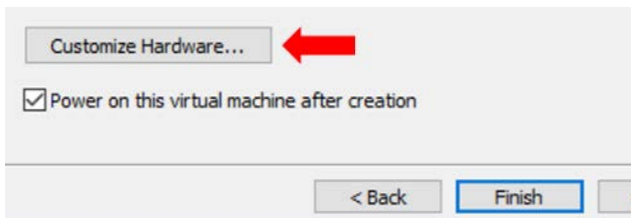
23. Name your virtual machine: *CyberVM*. Leave the default location as-is, and click “*Next >*”



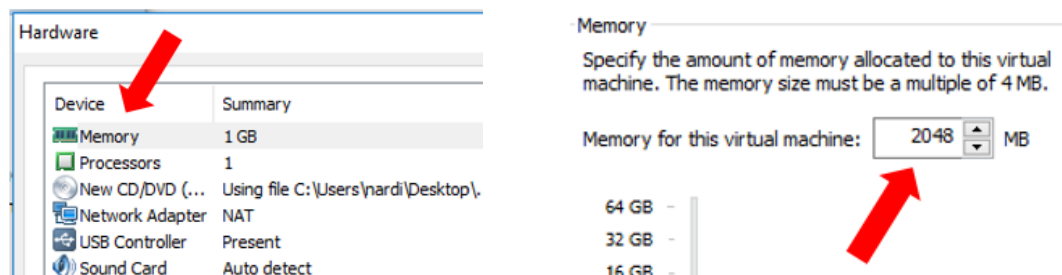
24. Leave the disk capacity set at 20.0 GB. Select the radio button labeled: “*Store virtual disk as a single file*” and click “*Next >*”



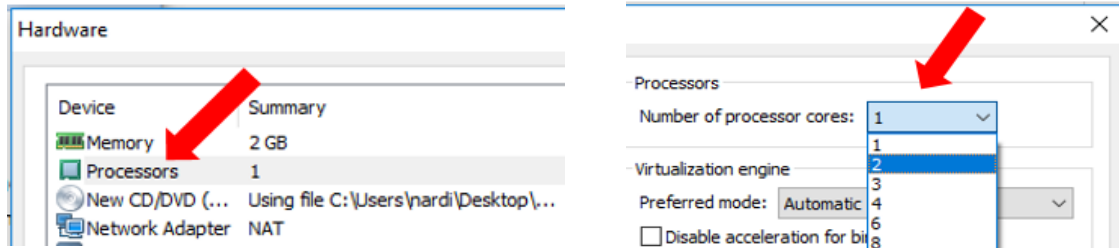
25. On the next screen, click on “*Customize Hardware...*”



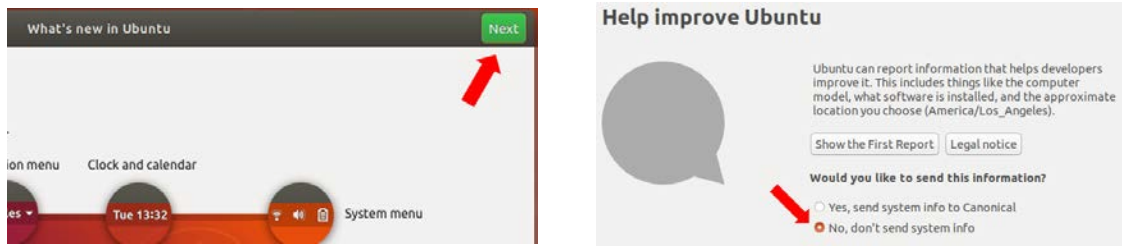
26. Click on the memory option, and type: 2048 in the box next to: “*Memory for this virtual machine:*”



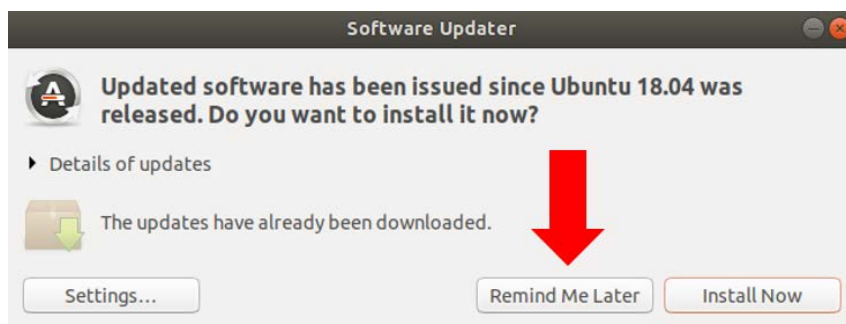
27. Click on the Processors option, and select "2" from the dropdown menu labeled: *"Number of processor cores:"* Leave all other options as-is and click on *"Close"*, then click on *"Finish"* on the next screen.



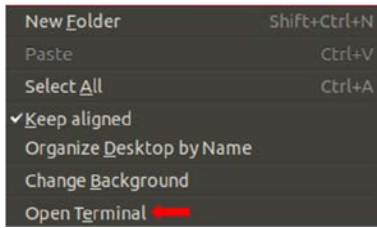
28. Ubuntu will go through the installation process. You may receive a Windows UAC warning. Allow the VMware software to install at this screen, when it asks for your authorization.
29. If everything was successful, you'll be presented with the Ubuntu login screen. Click on your name and enter your password (that you selected earlier) to continue.
30. You may now see a series of *"What's new in Ubuntu"* screens. Click the green *"Next"* button until you get to the *"Help Improve Ubuntu"* screen. Once there, select the *"No, don't send system info"* radio button.



31. Click the green *"Next"* button once, then click the green *"Done"* button.
32. You'll likely see a notification window that tells you there are pending updates. If so, click on *"Remind Me Later"*



33. Open a new terminal window by right clicking on the Ubuntu Desktop and selecting “*Open Terminal*”.



34. Let’s use the Linux Advanced Packaging Tool (*apt*) to complete a thorough update on your VM. Start the update process by entering this command in the terminal window, and pressing the enter key (*Note: all commands will be followed by the enter key*):

sudo apt update

If prompted for your password, enter the password you used when you created your VM.

NOTE: The characters won’t appear as you type your password, but they are being captured.

35. Next, type this command in the terminal window:

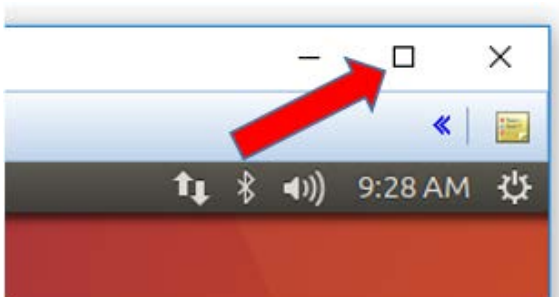
sudo apt upgrade <--Note: “upgrade” not “update”

You should get a prompt that says: “*Do you want to continue? [Y/n]*”, press return to complete the installation. This may take some time to run, but you’ll see an updated status as it works. When it’s complete (back at your command prompt), proceed to the next step.

36. Restart your VM by typing **reboot** (followed by the enter key) in your terminal window.

```
nardi@ubuntu:~$ reboot
```

37. Log back in to your VM. The VM window on the screen may appear small. If so, click the maximize button in the Player window once or twice until it resets to full screen.



38. Next, we're going to install some additional tools using *apt*. In the first step, we're installing two items: "*open vm tools*" and "*fuse*" by typing the command below in the terminal window. Enter your password if prompted.

```
sudo apt install open-vm-tools-desktop fuse
```

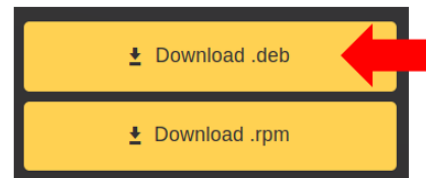
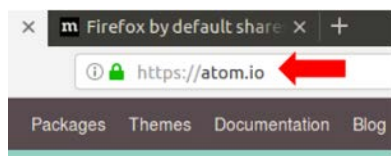
39. If you get the message similar to the one below, then you're all set. If not, you may see a status message printed to the screen, ending in: "*Do you want to continue? [Y/n]*". Press *enter* and wait until installation is complete. When installation is complete, restart your VM (step 36); now you're all set.

```
fuse is already the newest version (2.9.7-1ubuntu1).
open-vm-tools-desktop is already the newest version (2:10.2.0-3ubuntu3).
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
nardi@ubuntu:~$
```

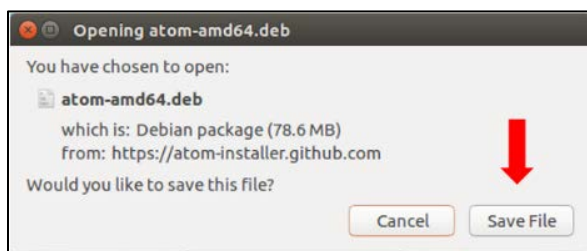
40. Install *seahorse-nautilus*: Seahorse Nautilus is an extension to Ubuntu that assists with public key encryption. Your instructor will discuss public key encryption with you at a later time. To install *seahorse-nautilus*, type the command below in your terminal window (enter your password if prompted). If you get a prompt that says: "*Do you want to continue? [Y/n]*", press return to continue and wait for the installation to complete:

```
sudo apt install seahorse-nautilus
```

41. Next, install the *atom* text editor. To do this, open Firefox from inside your VM, navigate to <https://atom.io> and click on the button labeled: "*Download .deb*"



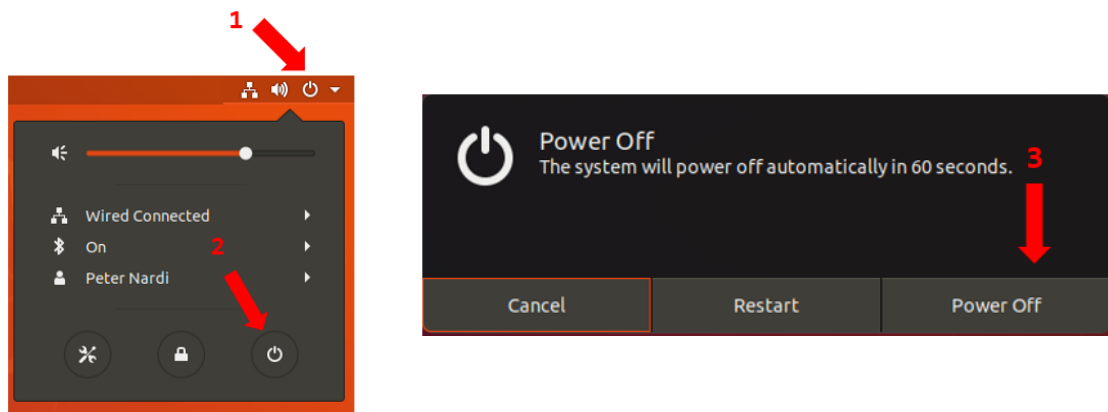
42. Save the file to disk (*You may get an option to run an installer, but choose to save the file to disk instead*).



43. We'll install *atom* by opening a terminal window and changing to the directory containing the *.deb* file (it should be *~/Downloads*). Type the two commands below and enter your password if prompted. When you get a prompt that says: *"Do you want to continue? [Y/n]"*, press return to continue and wait for the installation to complete.

```
cd ~/Downloads
sudo apt install ./atom-amd64.deb
```

44. Congratulations! You made it. Your VM is now ready for use. I encourage you to explore! Try the various programs that are installed to see what they do, and customize the look-and-feel of Ubuntu to your liking. I recommend that you routinely shut down your VM when you're done with it for the day. The pictures below show the necessary steps to shut down your VM



45. OPTIONAL:

- a. If you'd prefer to use Chrome instead of Firefox, point the Firefox browser (inside the VM) to this link and follow the directions:

<https://www.google.com/chrome/browser/desktop/index.html>