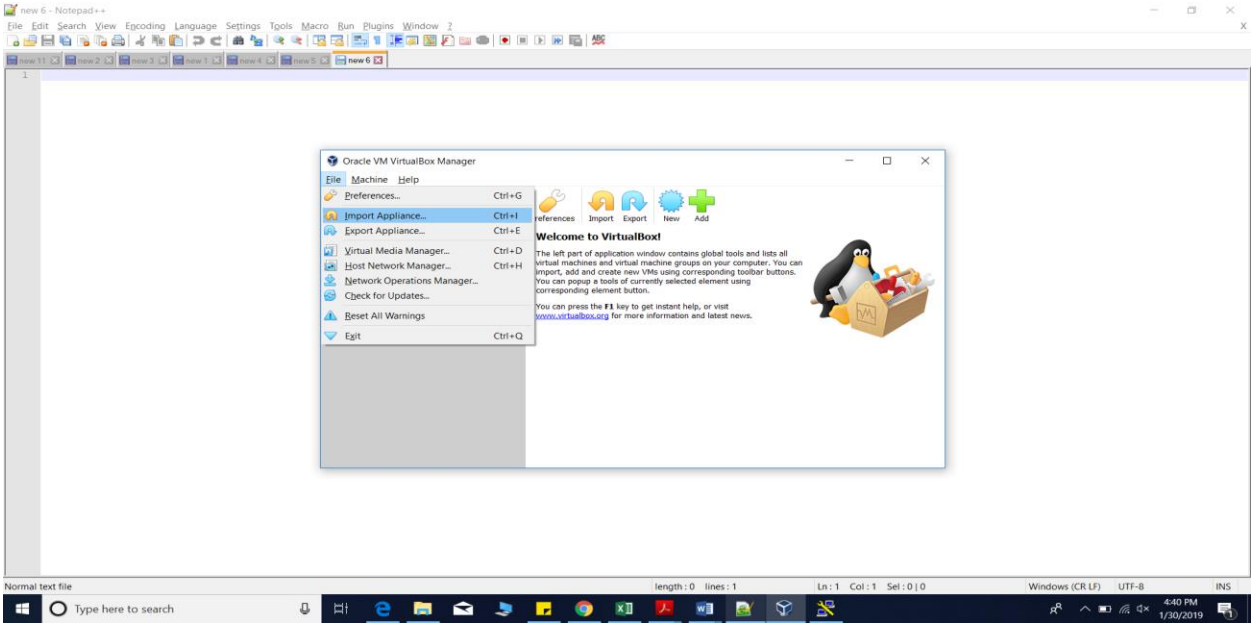
Assignment_1 Mininet Setup

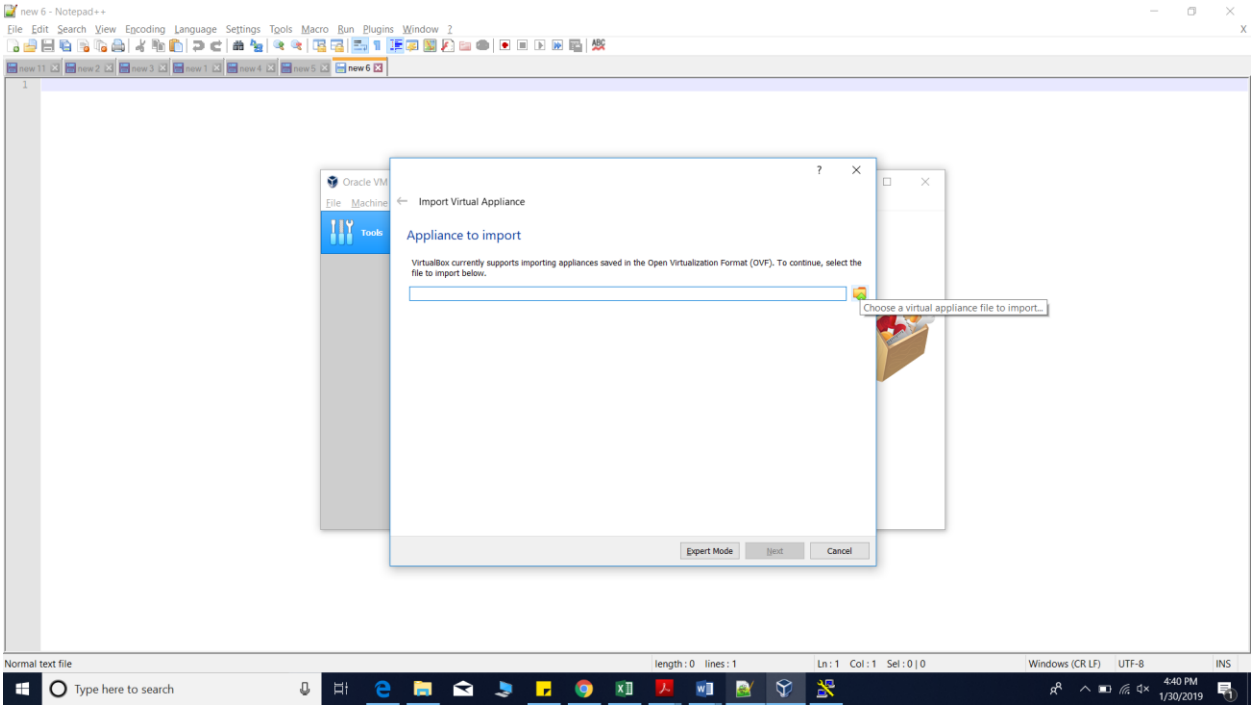
1. Name – Dhananjay Arora

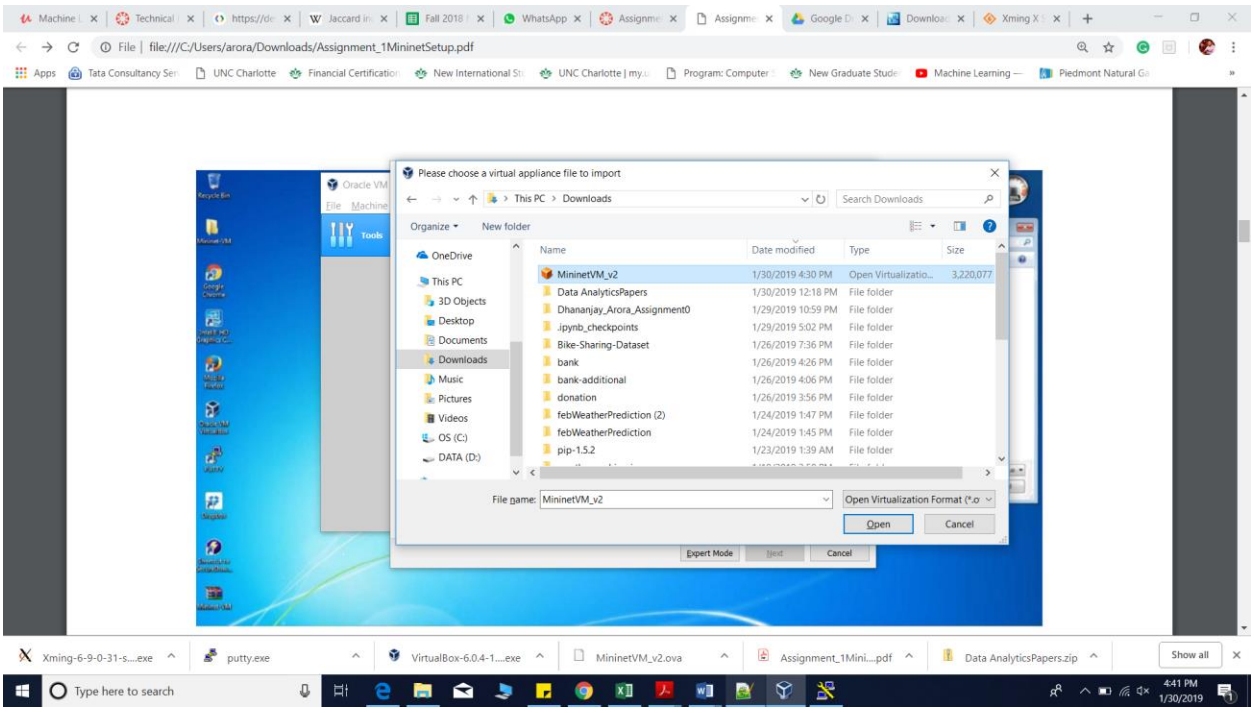
2. Software Details

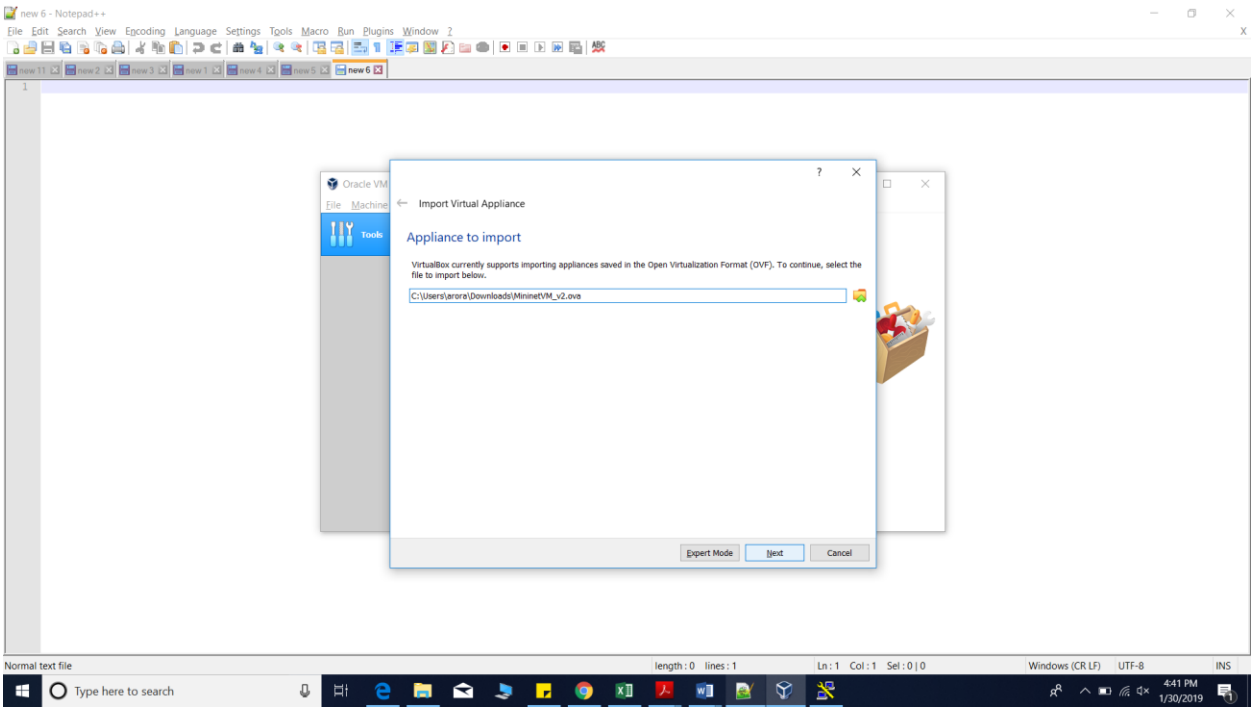
a. Operating System version - Windows 10 Home

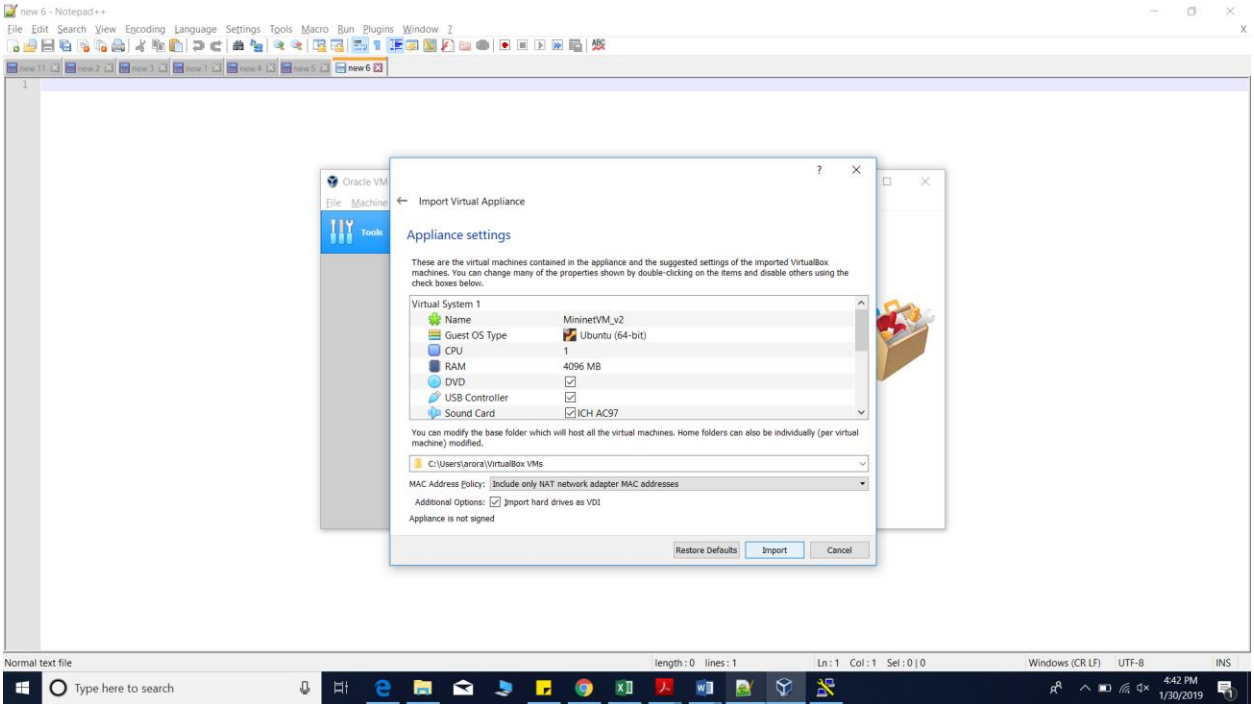
b. Virtualization tool name and version – Oracle VM VirtualBox 6.0 and Version 6.0.4 r128413 (Qt5.6.2)

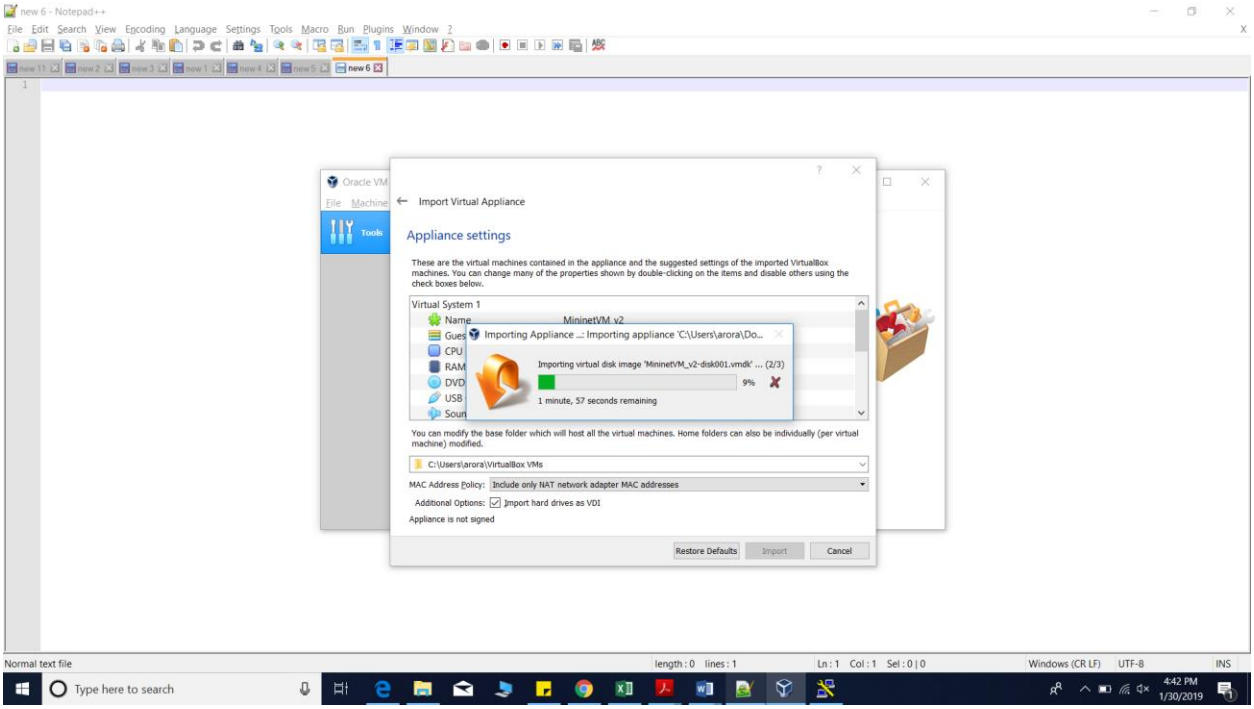

new 6 - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
Oracle VM VirtualBox Manager
File Machine Help
Preferences... Ctrl+G
Import Appliance... Ctrl+I
Export Appliance... Ctrl+E
Virtual Media Manager... Ctrl+D
Host Network Manager... Ctrl+H
Network Operations Manager...
Check for Updates...
Reset All Warnings
Exit Ctrl+Q
Import
Export
New
Add
Welcome to VirtualBox!
The left part of application window contains global tools and lists all virtual machines and virtual machine groups on your computer. You can import, add and create new VMs using corresponding toolbar buttons. You can popup a tools of currently selected element using corresponding element button.
You can press the F1 key to get instant help, or visit www.virtualbox.org for more information and latest news.
Normal text file
length : 0 lines : 1
Ln : 1 Col : 1 Sel : 0 | 0
Windows (CR LF) UTF-8 INS
Type here to search
4:40 PM
1/30/2019

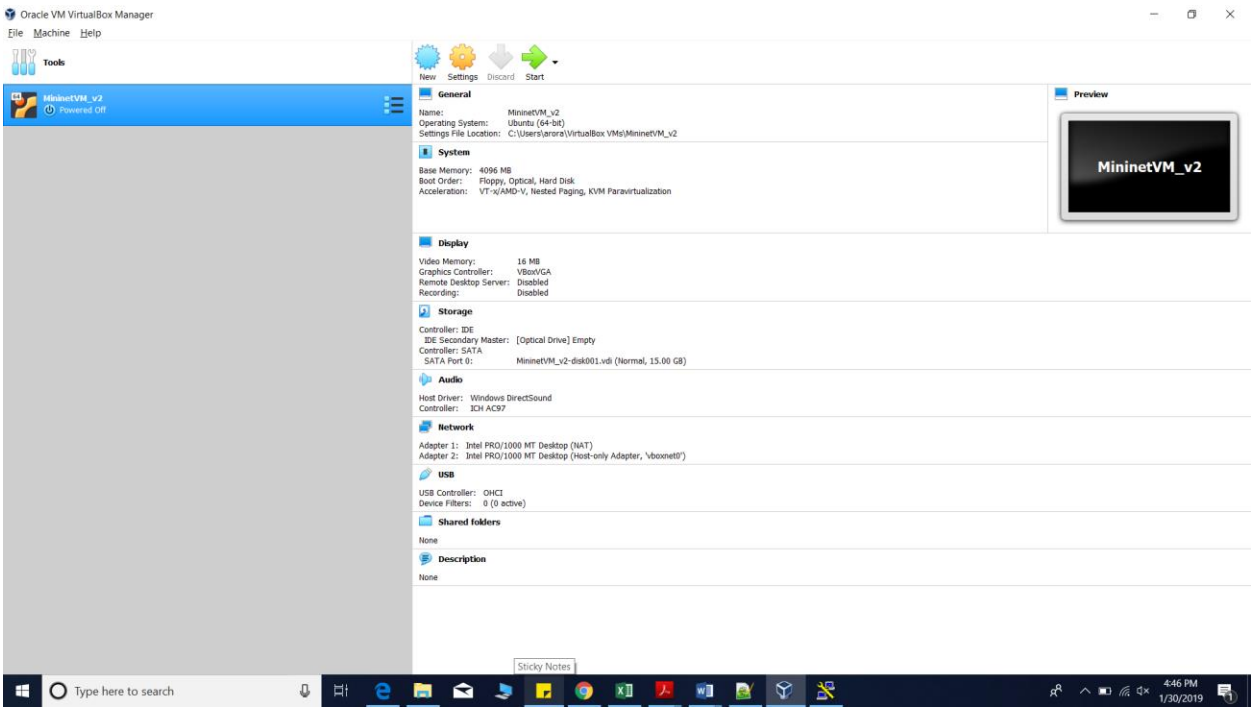

new 6 - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
Import Virtual Appliance
Appliance to import
VirtualBox currently supports importing appliances saved in the Open Virtualization Format (OVF). To continue, select the file to import below.
Choose a virtual appliance file to import...
Tools
Expert Mode
Next
Cancel
Normal text file
length : 0 lines : 1
Ln : 1 Col : 1 Sel : 0 | 0
Windows (CR LF) UTF-8 INS
Type here to search
4:40 PM
1/30/2019

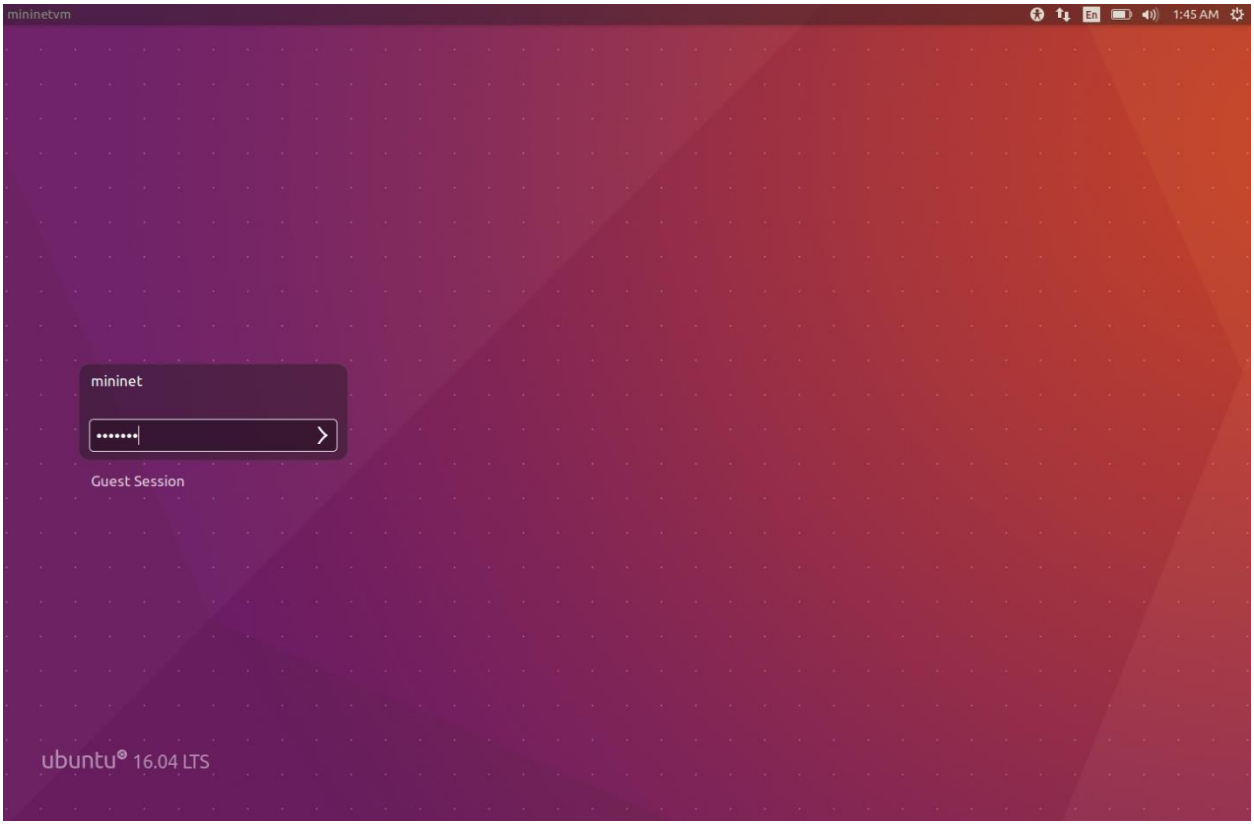

Please choose a virtual appliance file to import
This PC › Downloads
Search Downloads
Organize
New folder
OneDrive
This PC
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Videos
OS (C:)
DATA (D:)
Name
Date modified
Type
Size
MininetVM_v2 1/30/2019 4:30 PM Open Virtualizatio... 3,220,077
Data AnalyticsPapers 1/30/2019 12:18 PM File folder
Dhananjay_Arora_Assignment0 1/29/2019 10:59 PM File folder
.ipynb_checkpoints 1/29/2019 5:02 PM File folder
Bike-Sharing-Dataset 1/26/2019 7:36 PM File folder
bank 1/26/2019 4:26 PM File folder
bank-additional 1/26/2019 4:06 PM File folder
donation 1/26/2019 3:56 PM File folder
febWeatherPrediction (2) 1/24/2019 1:47 PM File folder
febWeatherPrediction 1/24/2019 1:45 PM File folder
pip-1.5.2 1/23/2019 1:39 AM File folder
File name: MininetVM_v2
Open Virtualization Format (*.o
Open
Cancel
Expert Mode
Next
Cancel
Xming-6-9-0-31-s....exe
putty.exe
VirtualBox-6.0.4-1....exe
MininetVM_v2.ova
Assignment_1Mini....pdf
Data AnalyticsPapers.zip
Show all
Type here to search
4:41 PM
1/30/2019

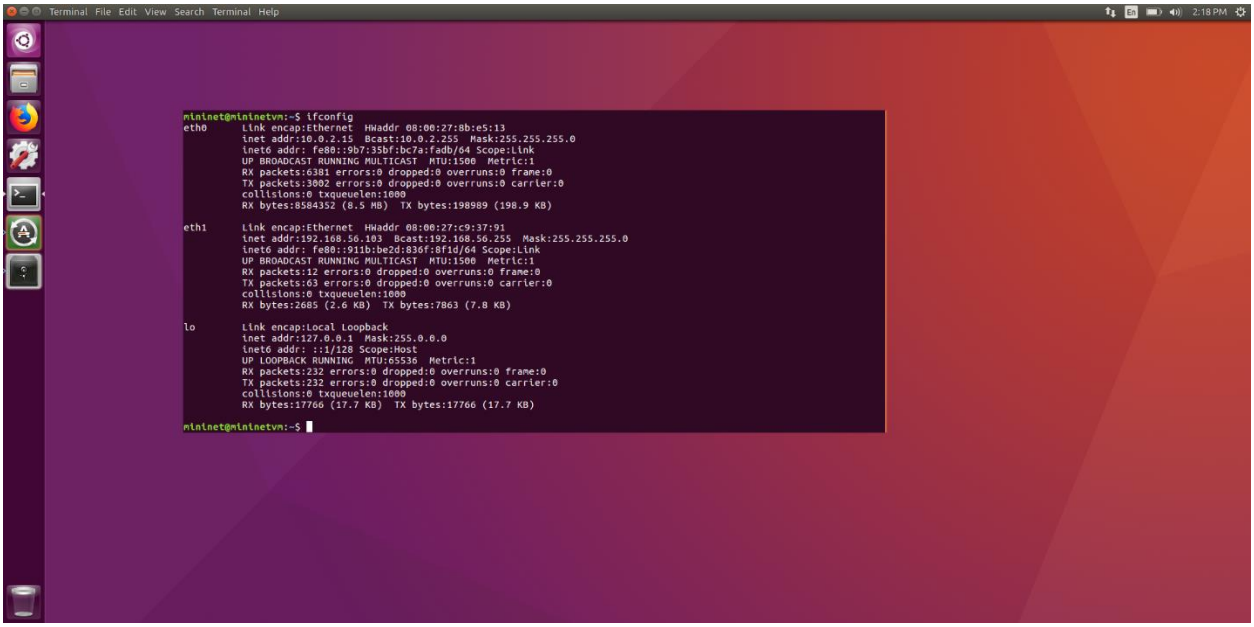

new 6 - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
Import Virtual Appliance
Appliance to import
VirtualBox currently supports importing appliances saved in the Open Virtualization Format (OVF). To continue, select the file to import below.
C:\Users\arora\Downloads\MininetVM_v2.ova
Expert Mode
Next
Cancel
Normal text file
length : 0 lines : 1
Ln : 1 Col : 1 Sel : 0 | 0
Windows (CR LF)
UTF-8
INS
Type here to search
4:41 PM
1/30/2019

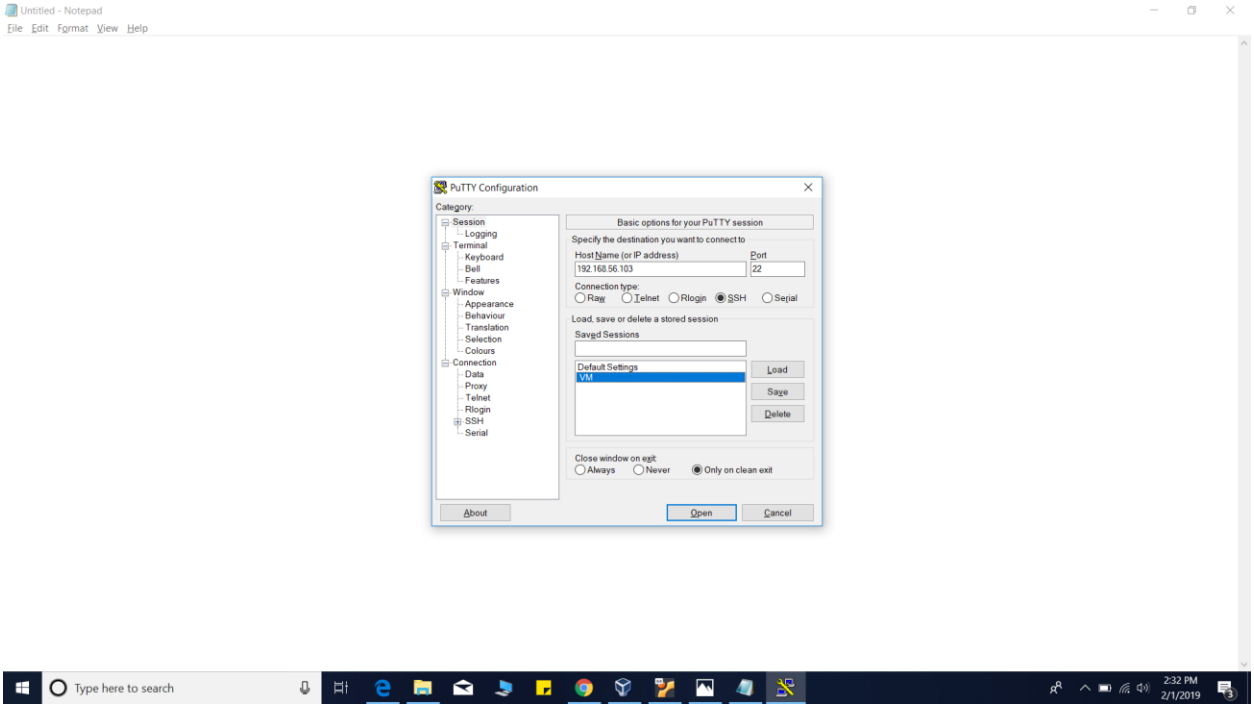

new 6 - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
Oracle VM
File Machine
Tools
Import Virtual Appliance
Appliance settings
These are the virtual machines contained in the appliance and the suggested settings of the imported VirtualBox machines. You can change many of the properties shown by double-clicking on the items and disable others using the check boxes below.
Virtual System 1
Name MininetVM_v2
Guest OS Type Ubuntu (64-bit)
CPU 1
RAM 4096 MB
DVD
USB Controller
Sound Card ICH AC97
You can modify the base folder which will host all the virtual machines. Home folders can also be individually (per virtual machine) modified.
C:\Users\arora\VirtualBox VMs
MAC Address Policy: Include only NAT network adapter MAC addresses
Additional Options: Import hard drives as VDI
Appliance is not signed
Restore Defaults
Import
Cancel
Normal text file
length : 0 lines : 1
Ln : 1 Col : 1 Sel : 0 | 0
Windows (CR LF) UTF-8 INS
Type here to search
4:42 PM
1/30/2019

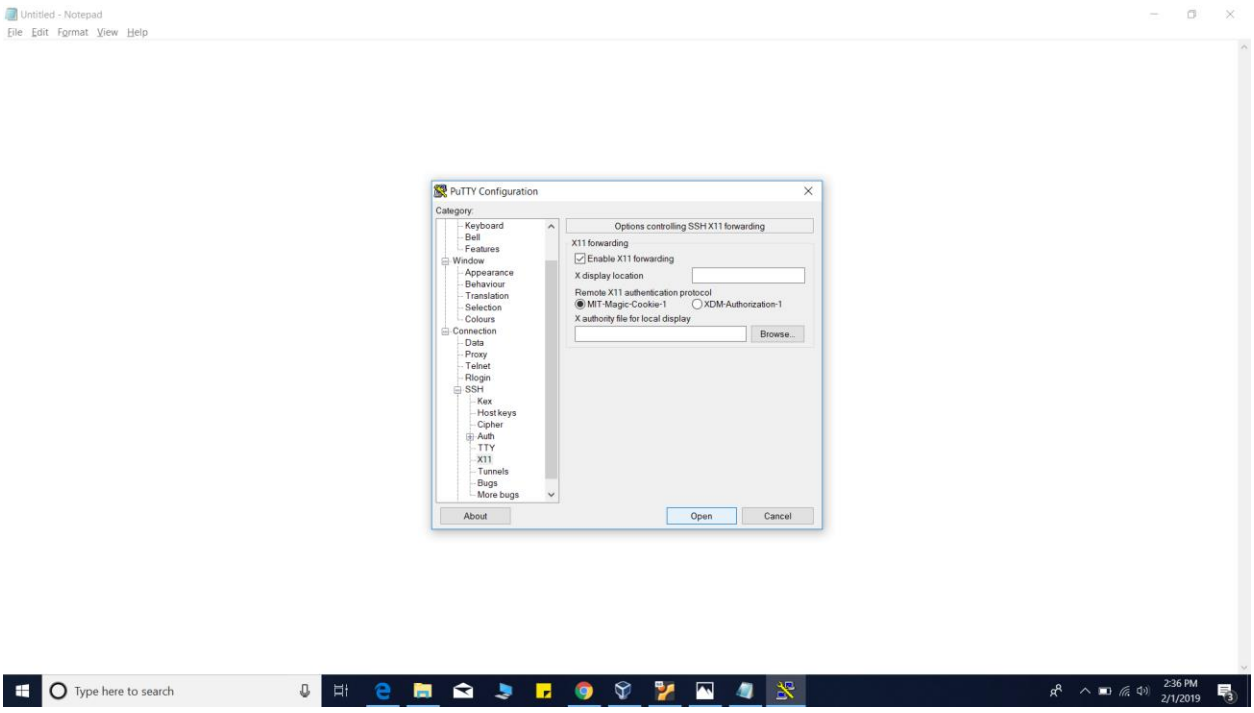

new 6 - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
Oracle VM
File Machine
Tools
Import Virtual Appliance
Appliance settings
These are the virtual machines contained in the appliance and the suggested settings of the imported VirtualBox machines. You can change many of the properties shown by double-clicking on the items and disable others using the check boxes below.
Virtual System 1
Importing Appliance ...: Importing appliance 'C:\Users\arora\Do...
Importing virtual disk image 'MininetVM_v2-disk001.vmdk' ... (2/3)
9%
1 minute, 57 seconds remaining
You can modify the base folder which will host all the virtual machines. Home folders can also be individually (per virtual machine) modified.
C:\Users\arora\VirtualBox VMs
MAC Address Policy: Include only NAT network adapter MAC addresses
Additional Options: Import hard drives as VDI
Appliance is not signed
Restore Defaults
Import
Cancel
Normal text file
length : 0 lines : 1
Ln : 1 Col : 1 Sel : 0 | 0
Windows (CR LF) UTF-8 INS
Type here to search
4:42 PM
1/30/2019

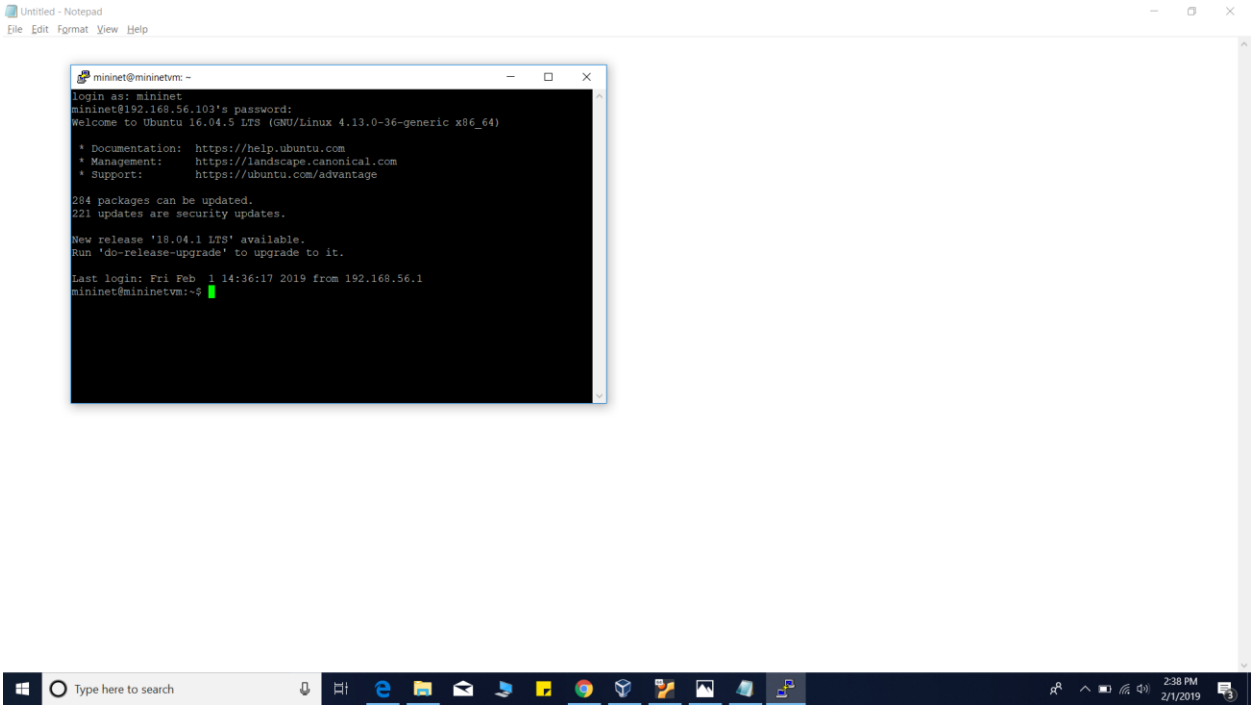

Oracle VM VirtualBox Manager
File Machine Help
Tools
MininetVM_v2
Powered Off
New Settings Discard Start
General
Name: MininetVM_v2
Operating System: Ubuntu (64-bit)
Settings File Location: C:\Users\arora\VirtualBox VMs\MininetVM_v2
System
Base Memory: 4096 MB
Boot Order: Floppy, Optical, Hard Disk
Acceleration: VT-x/AMD-V, Nested Paging, KVM Paravirtualization
Preview
MininetVM_v2
Display
Video Memory: 16 MB
Graphics Controller: VBoxVGA
Remote Desktop Server: Disabled
Recording: Disabled
Storage
Controller: IDE
IDE Secondary Master: [Optical Drive] Empty
Controller: SATA
SATA Port 0: MininetVM_v2-disk001.vdi (Normal, 15.00 GB)
Audio
Host Driver: Windows DirectSound
Controller: ICH AC97
Network
Adapter 1: Intel PRO/1000 MT Desktop (NAT)
Adapter 2: Intel PRO/1000 MT Desktop (Host-only Adapter, 'vboxnet0')
USB
USB Controller: OHCI
Device Filters: 0 (0 active)
Shared folders
None
Description
None
Sticky Notes
Type here to search
4:46 PM
1/30/2019


mininetvm
1:45 AM
mininet
Guest Session
ubuntu® 16.04 LTS


Terminal File Edit View Search Terminal Help
2:18 PM
mininet@mininetvm:~$ ifconfig
eth0 Link encap:Ethernet HWaddr 08:00:27:8b:e5:13
inet addr:10.0.2.15 Bcast:10.0.2.255 Mask:255.255.255.0
inet6 addr: fe80::9b7:35bf:bc7a:fadb/64 Scope:Link
UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
RX packets:6381 errors:0 dropped:0 overruns:0 frame:0
TX packets:3002 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:1000
RX bytes:8584352 (8.5 MB) TX bytes:198989 (198.9 KB)
eth1 Link encap:Ethernet HWaddr 08:00:27:c9:37:91
inet addr:192.168.56.103 Bcast:192.168.56.255 Mask:255.255.255.0
inet6 addr: fe80::911b:be2d:836f:8f1d/64 Scope:Link
UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
RX packets:12 errors:0 dropped:0 overruns:0 frame:0
TX packets:63 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:1000
RX bytes:2685 (2.6 KB) TX bytes:7863 (7.8 KB)
lo Link encap:Local Loopback
inet addr:127.0.0.1 Mask:255.0.0.0
inet6 addr: ::1/128 Scope:Host
UP LOOPBACK RUNNING MTU:65536 Metric:1
RX packets:232 errors:0 dropped:0 overruns:0 frame:0
TX packets:232 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:1000
RX bytes:17766 (17.7 KB) TX bytes:17766 (17.7 KB)
mininet@mininetvm:~$


Untitled - Notepad
File Edit Format View Help
PuTTY Configuration
Category:
Session
Logging
Terminal
Keyboard
Bell
Features
Window
Appearance
Behaviour
Translation
Selection
Colours
Connection
Data
Proxy
Telnet
Rlogin
SSH
Serial
Basic options for your PuTTY session
Specify the destination you want to connect to
Host Name (or IP address)
Port
192.168.56.103
22
Connection type:
Raw
Telnet
Rlogin
SSH
Serial
Load, save or delete a stored session
Saved Sessions
Default Settings
VM
Load
Save
Delete
Close window on exit:
Always
Never
Only on clean exit
About
Open
Cancel
Type here to search
2:32 PM
2/1/2019


Untitled - Notepad
File Edit Format View Help
PuTTY Configuration
Category:
Keyboard
Bell
Features
Window
Appearance
Behaviour
Translation
Selection
Colours
Connection
Data
Proxy
Telnet
Rlogin
SSH
Kex
Host keys
Cipher
Auth
TTY
X11
Tunnels
Bugs
More bugs
Options controlling SSH X11 forwarding
X11 forwarding
Enable X11 forwarding
X display location
Remote X11 authentication protocol
MIT-Magic-Cookie-1
XDM-Authorization-1
X authority file for local display
Browse...
About
Open
Cancel
Type here to search
2:36 PM
2/1/2019


Untitled - Notepad
File Edit Format View Help
mininet@mininetvm: ~
login as: mininet
mininet@192.168.56.103's password:
Welcome to Ubuntu 16.04.5 LTS (GNU/Linux 4.13.0-36-generic x86_64)
* Documentation: https://help.ubuntu.com
* Management: https://landscape.canonical.com
* Support: https://ubuntu.com/advantage
284 packages can be updated.
221 updates are security updates.
New release '18.04.1 LTS' available.
Run 'do-release-upgrade' to upgrade to it.
Last login: Fri Feb 1 14:36:17 2019 from 192.168.56.1
mininet@mininetvm:~$
Type here to search
2:38 PM
2/1/2019