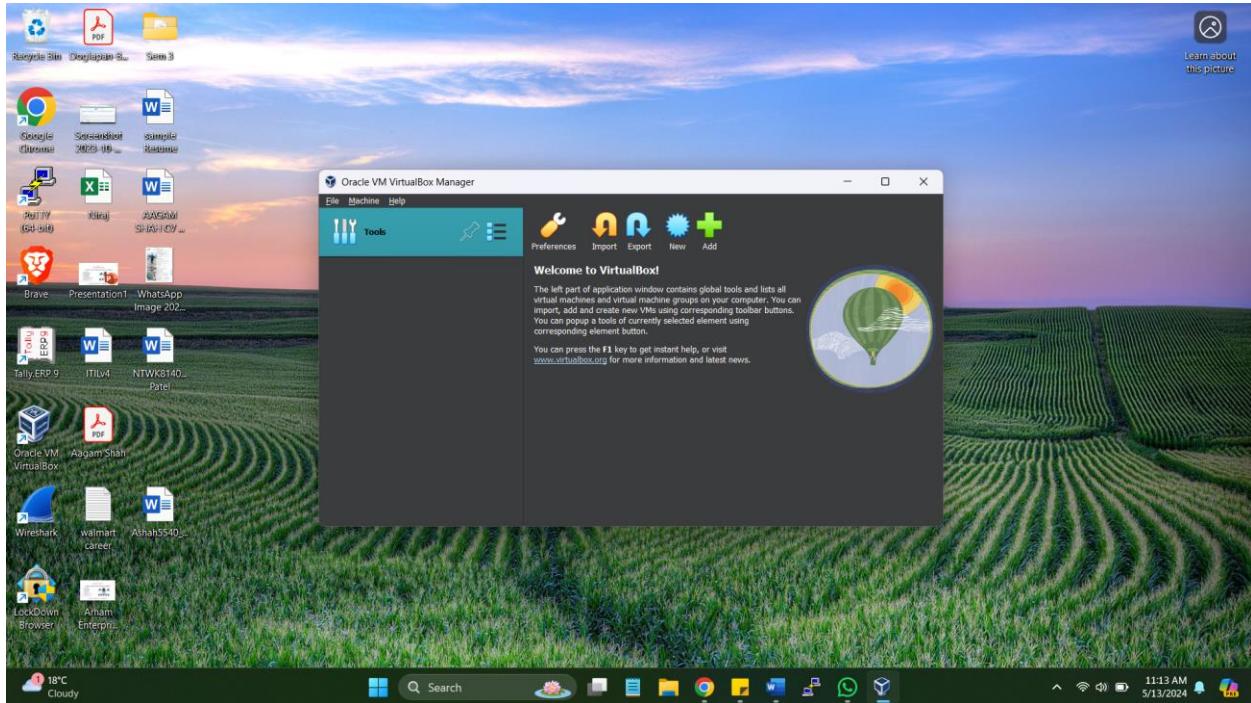


Name: Aagam Sanjay Shah

Student ID: 8935540

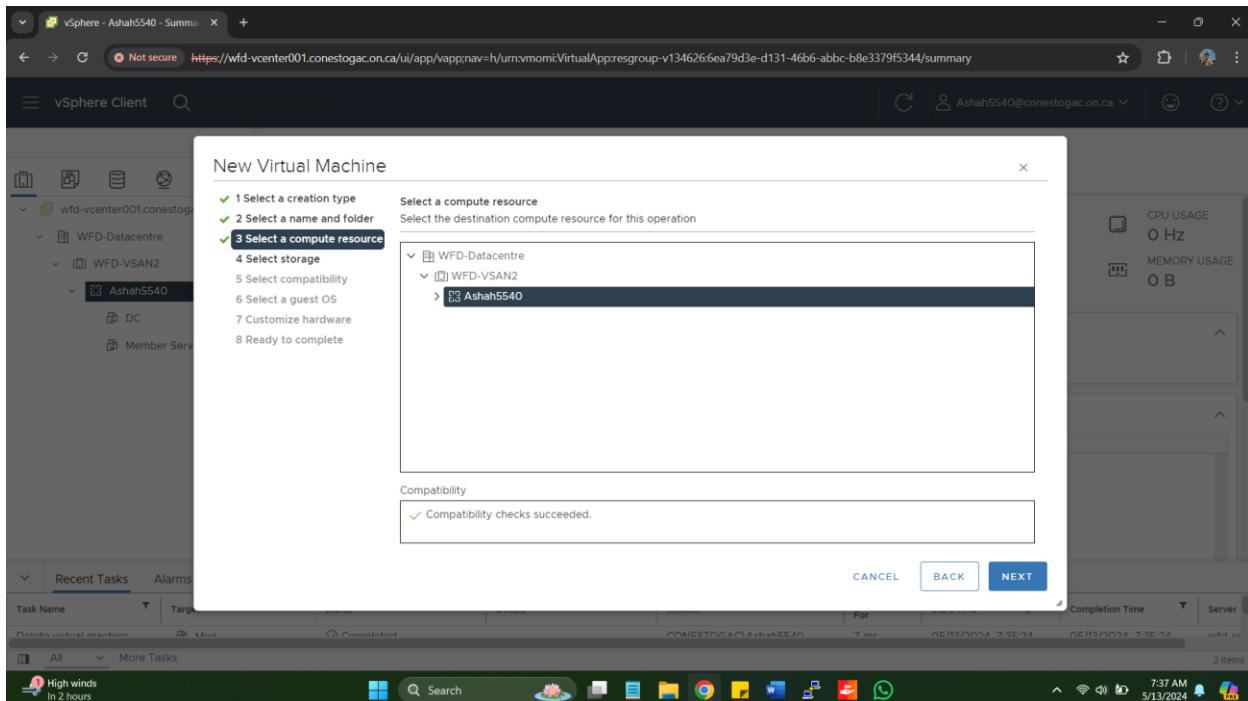
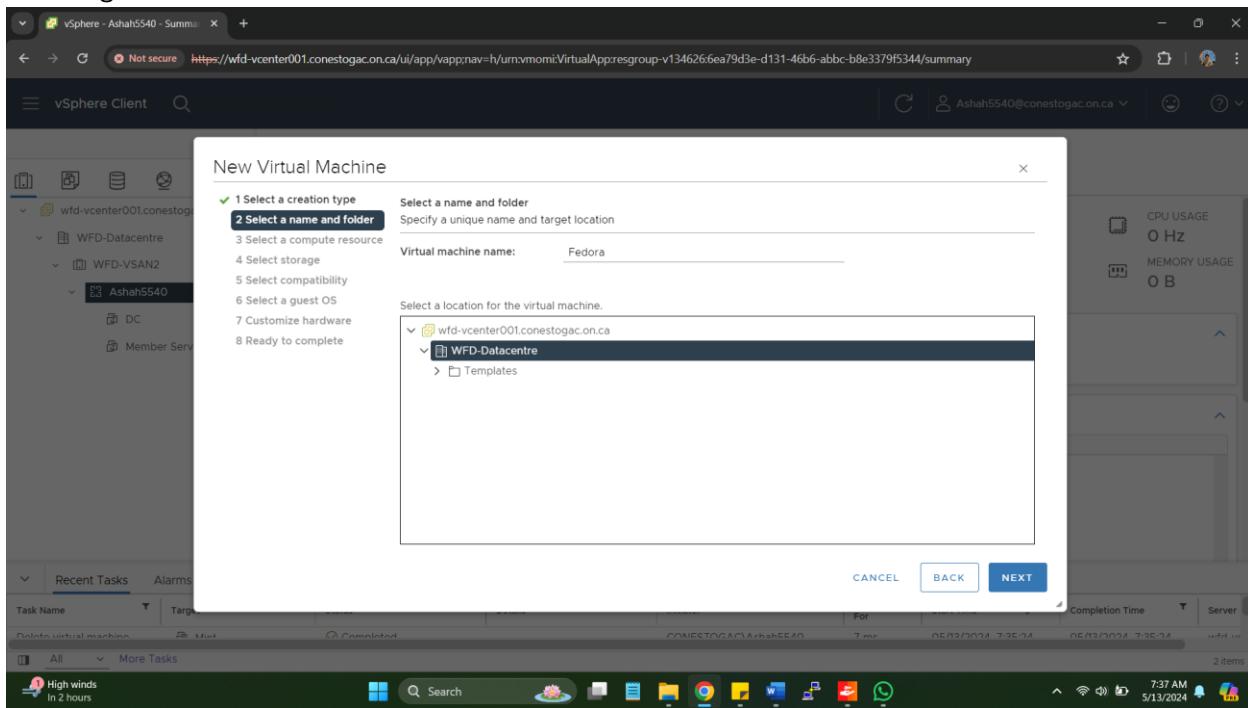
In Class assignment

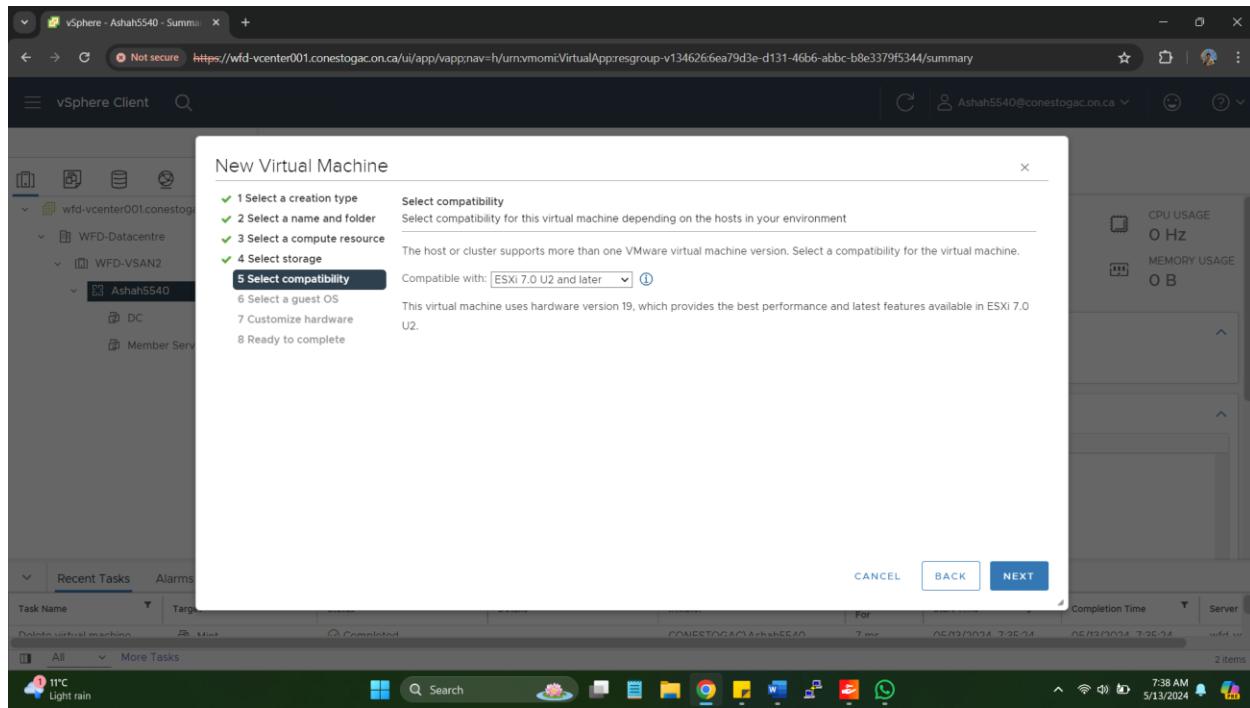
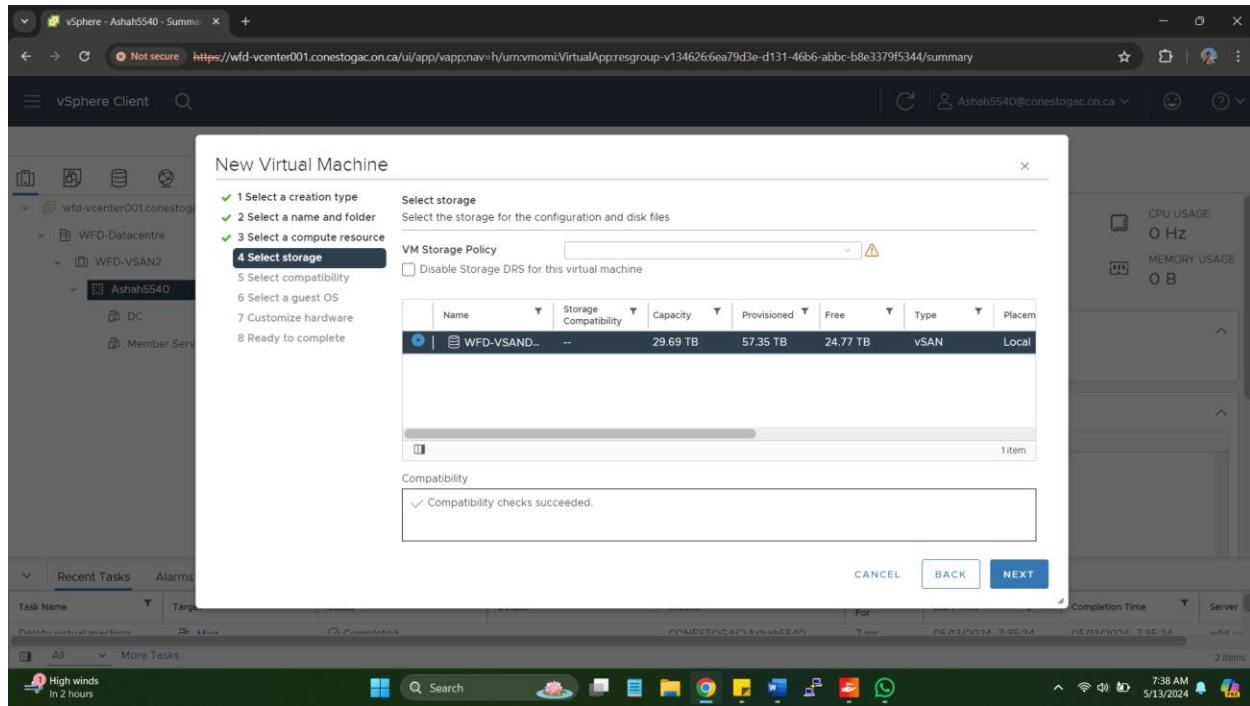
## 1. Installed Virtual Box on Laptop

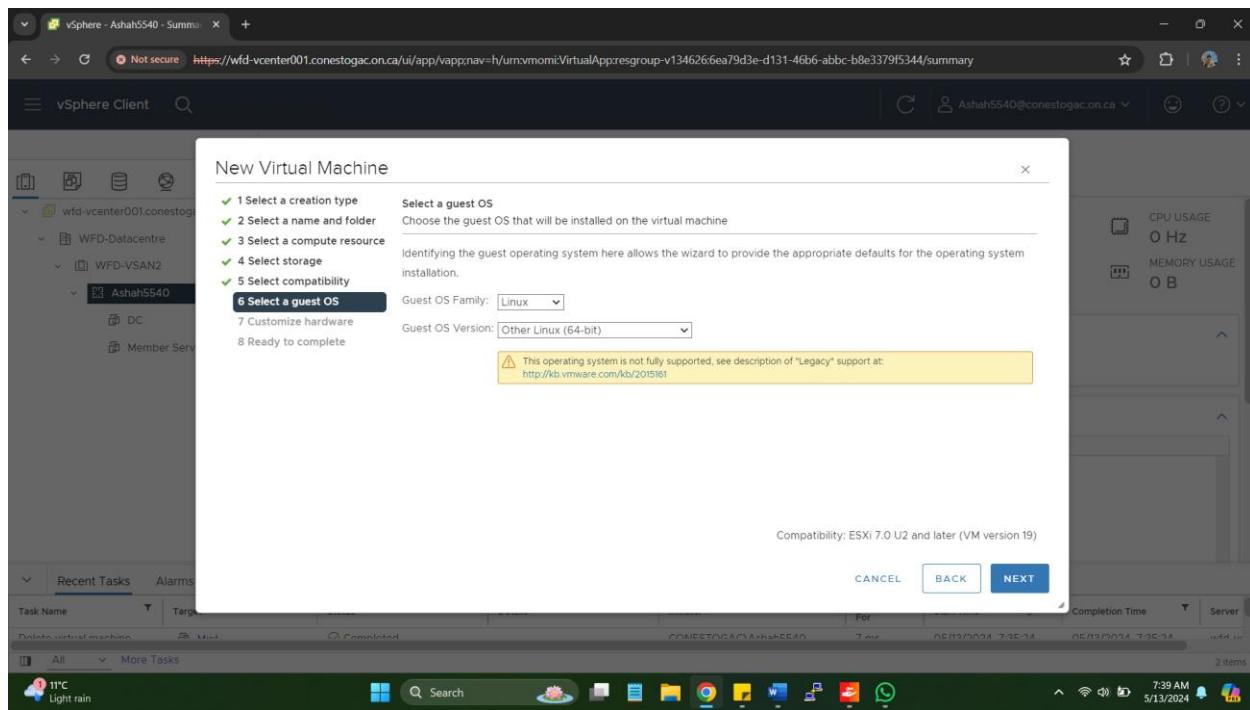


## 2. Mount the Latest Fedora Desktop

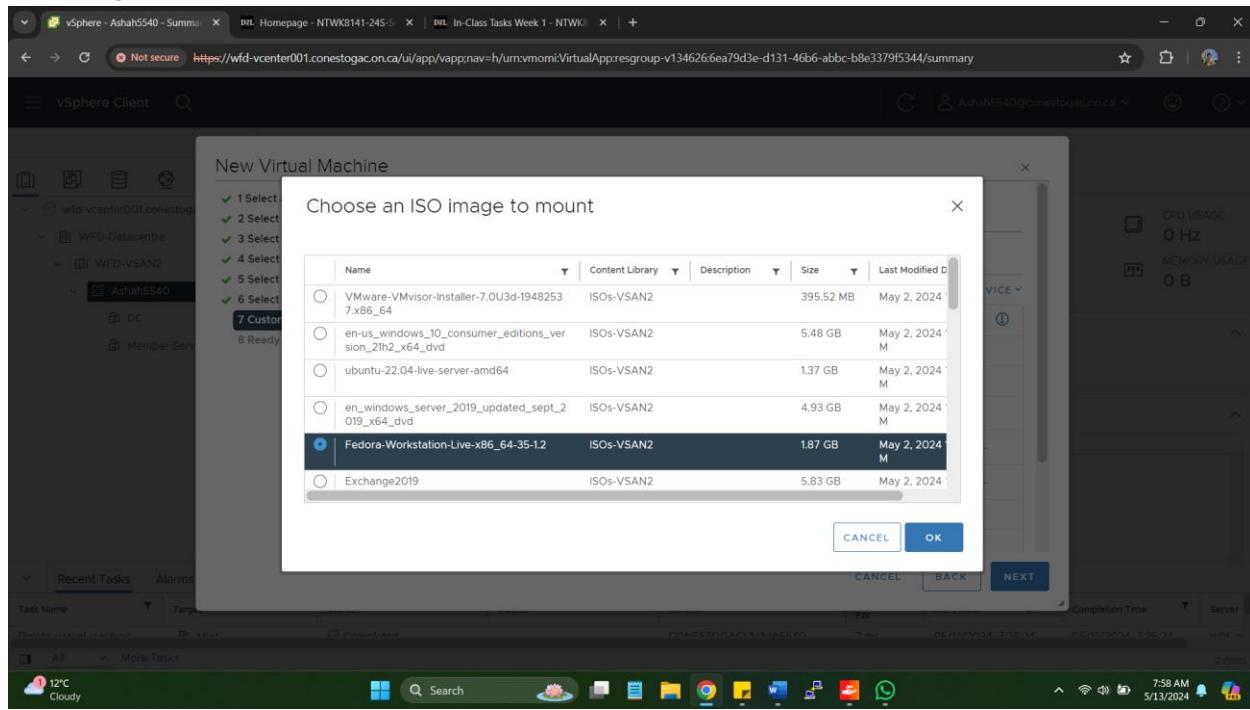
## Creating Virtual Machine name: Fedora





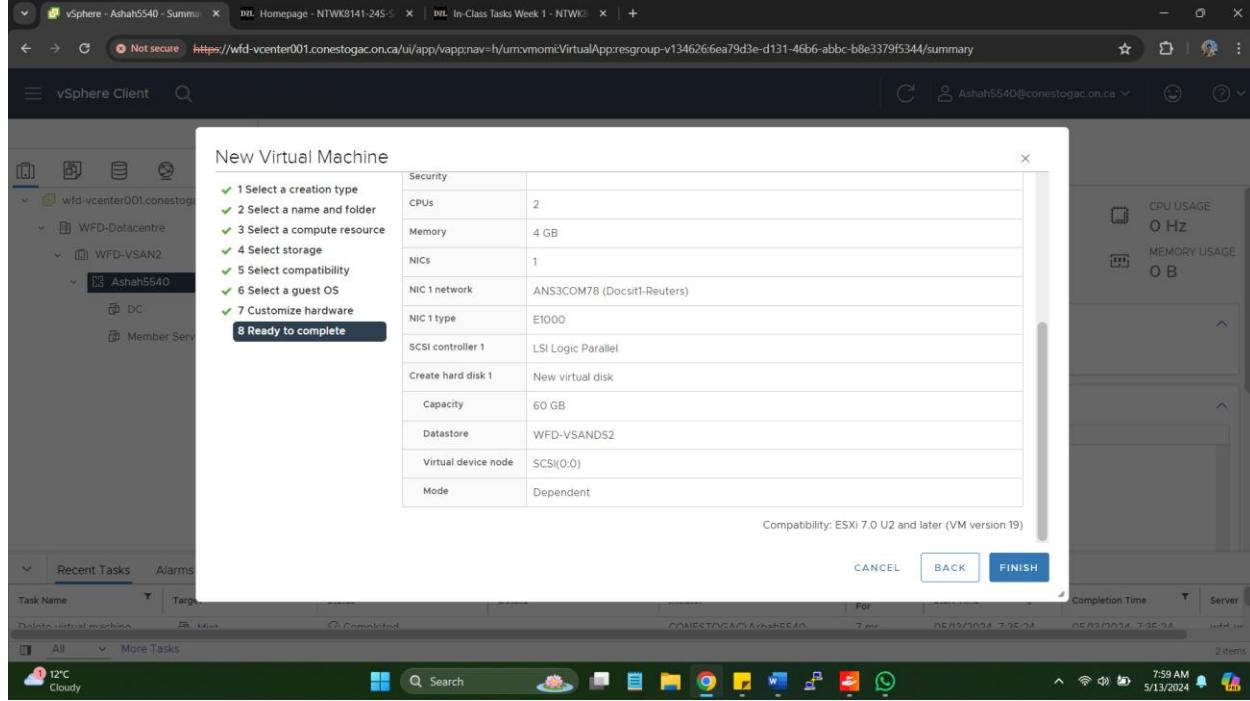
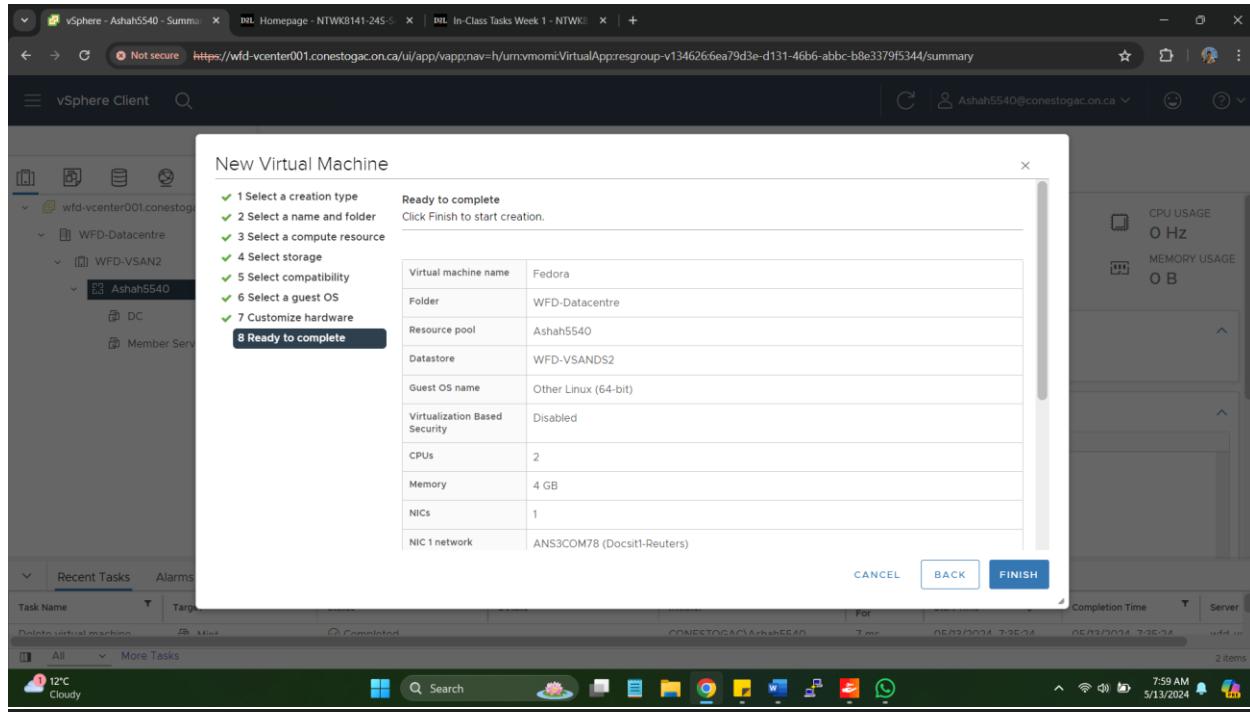


### Selecting Fedora Workstation ISO to mount on VM

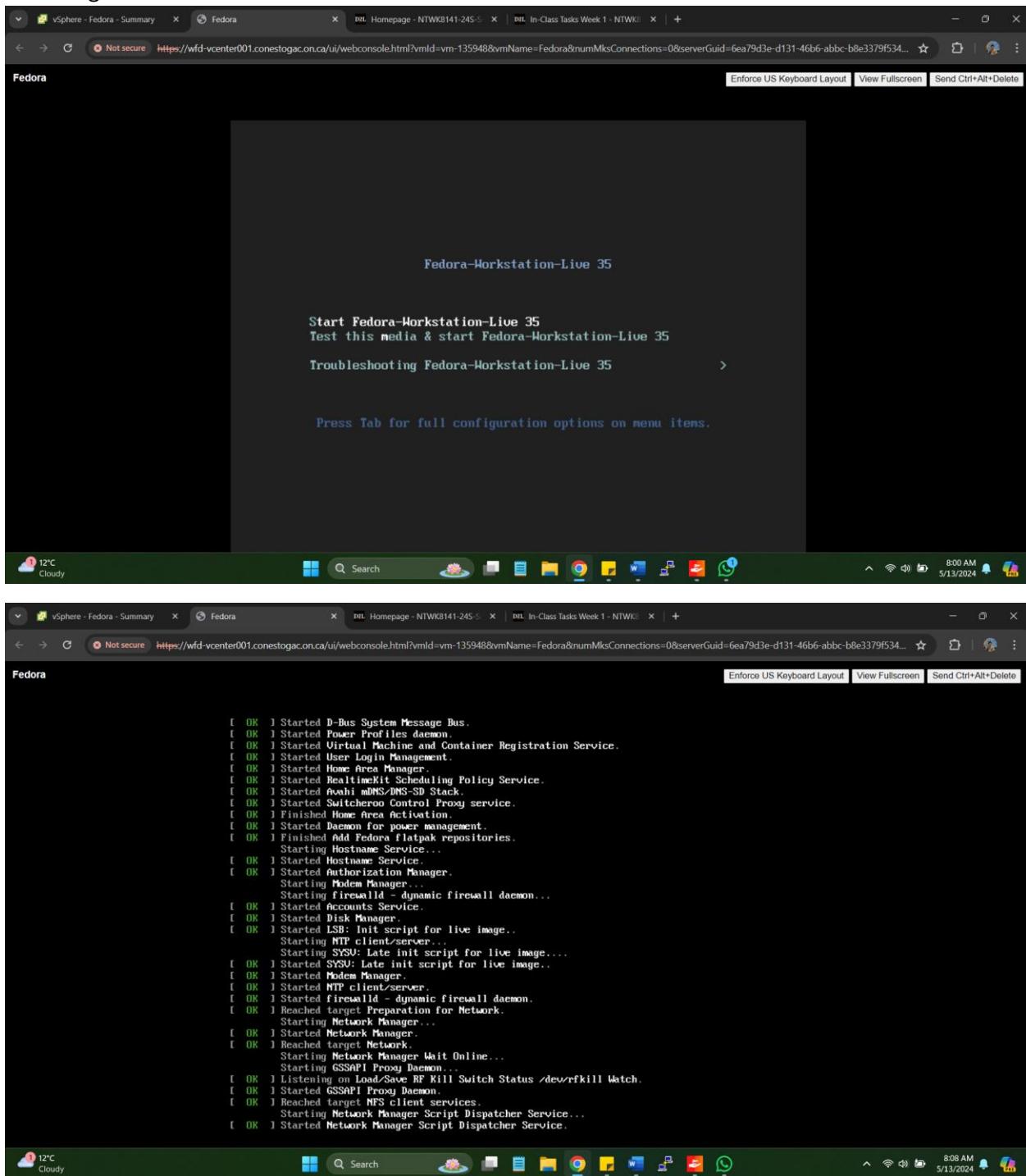


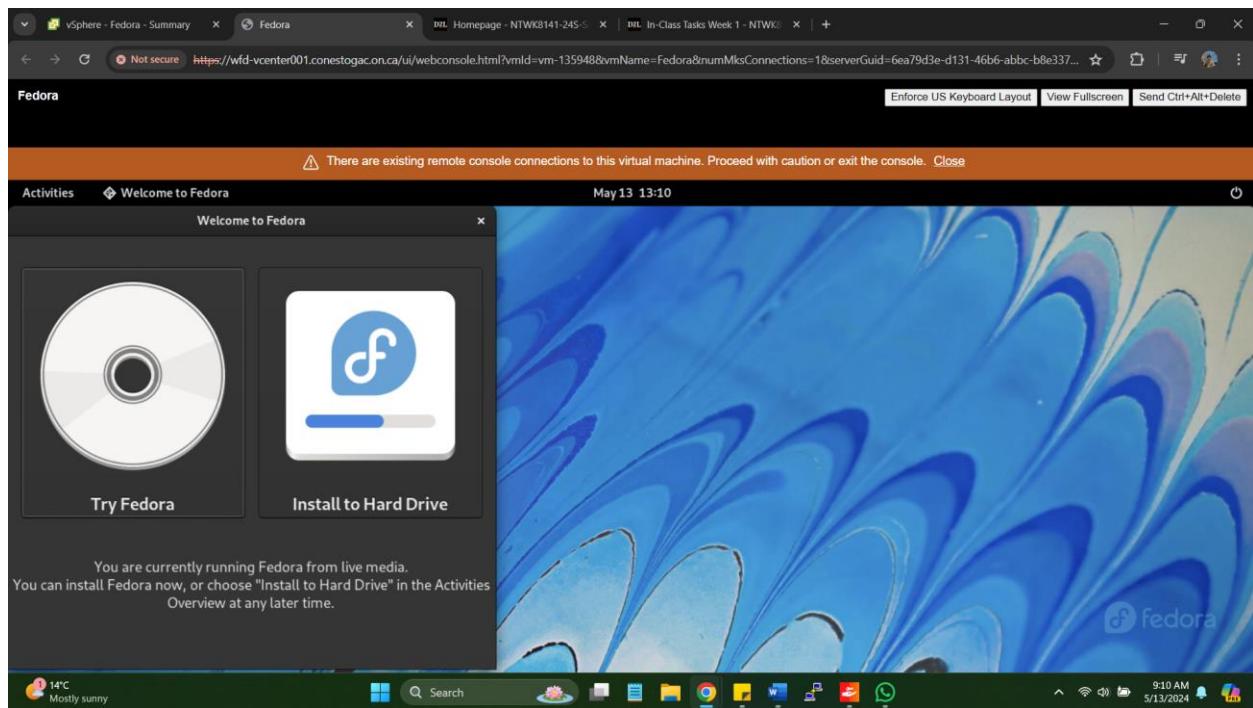
Summary of specification selected for Fedora OS installation.

- 2 cores
- 4GB ram
- 60GB hard drive

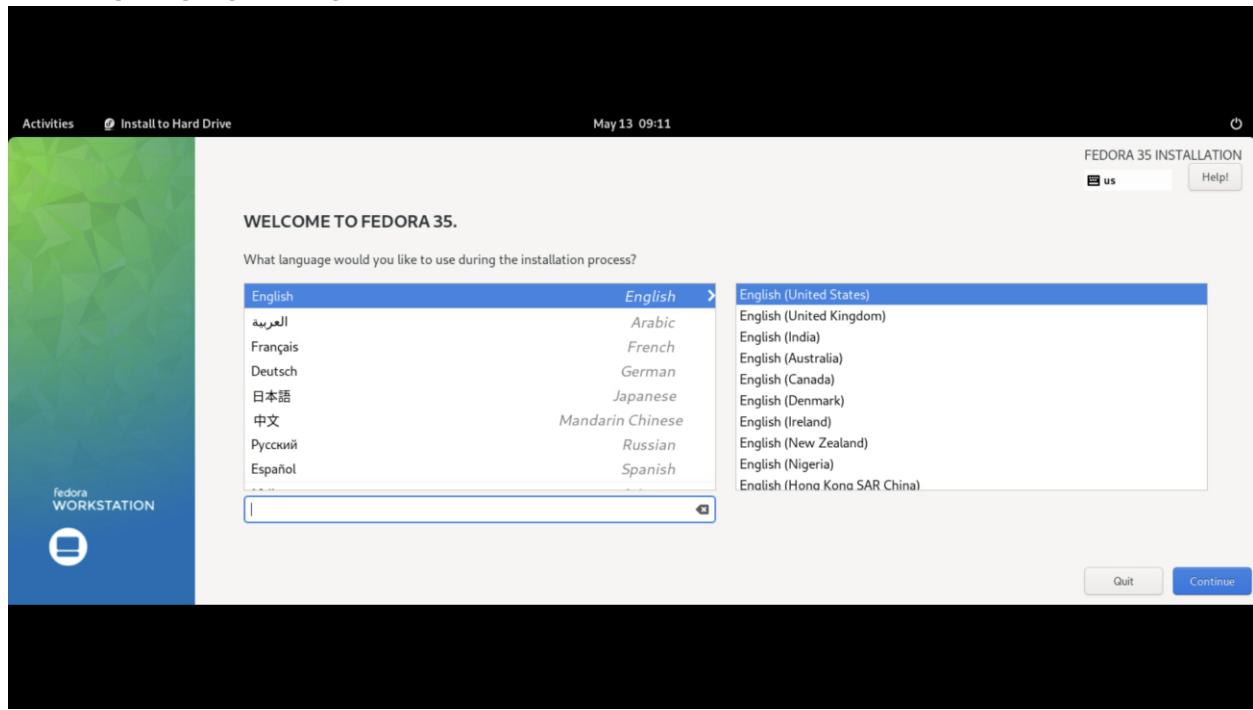


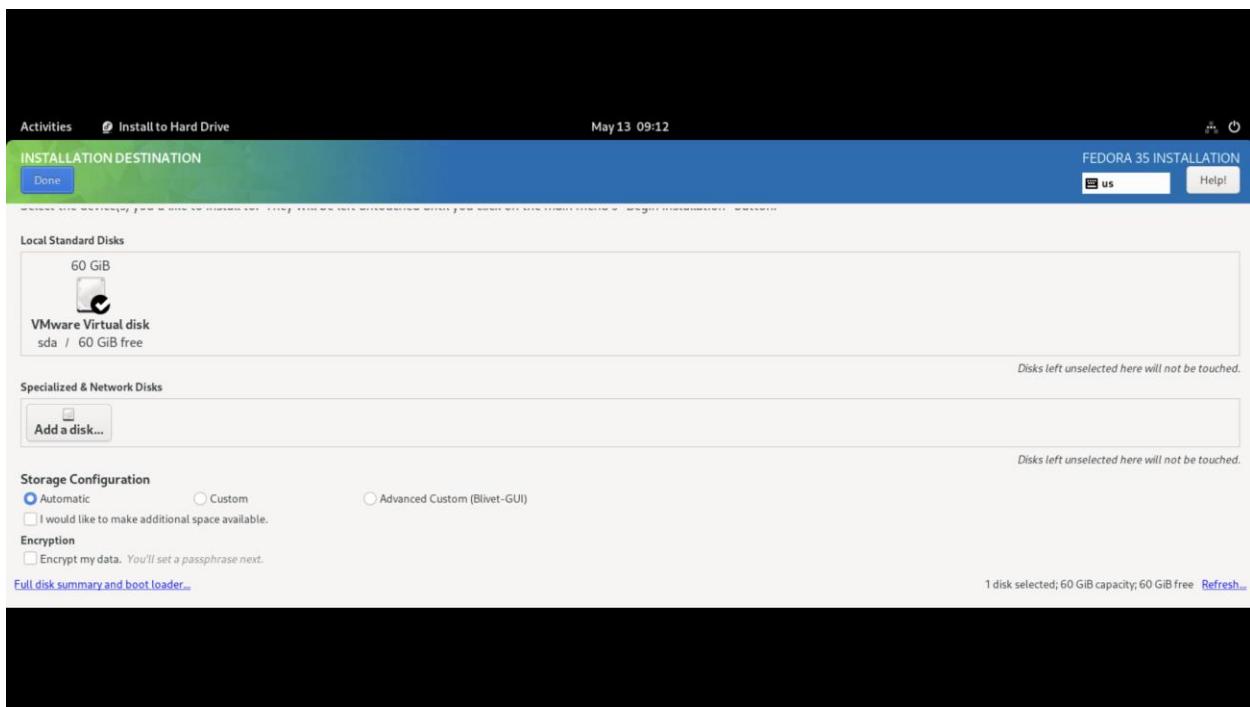
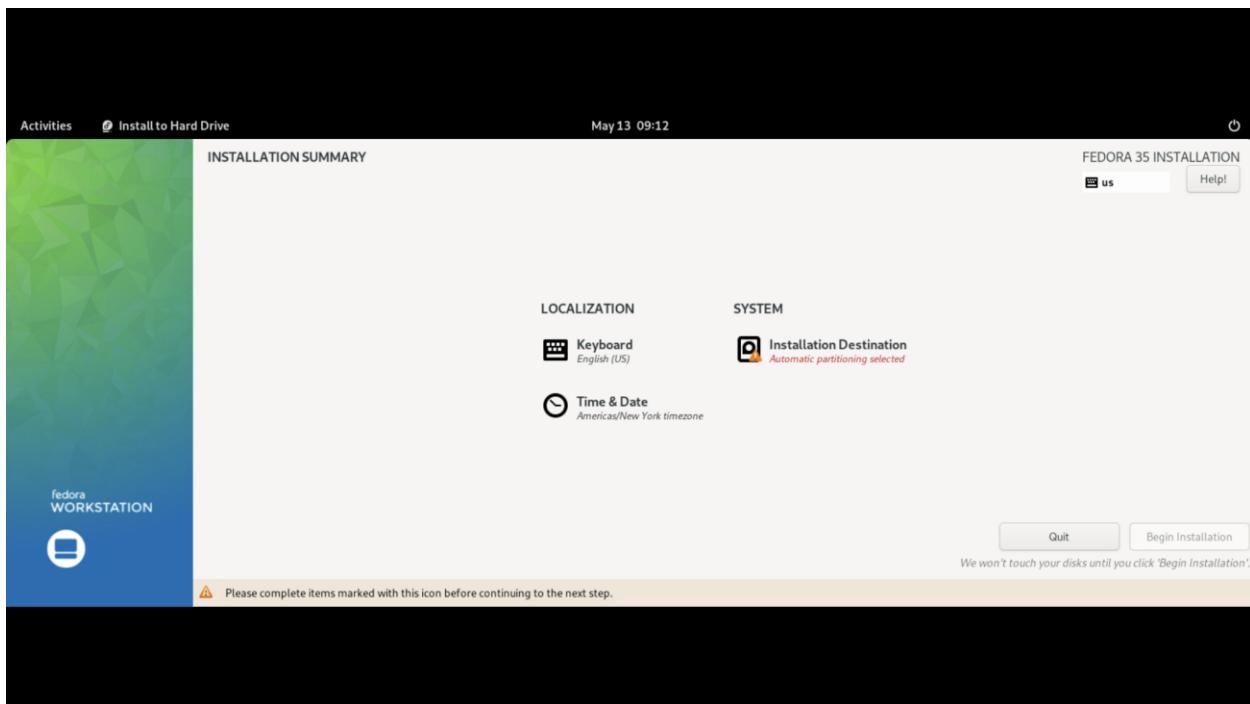
## Installing Fedora OS

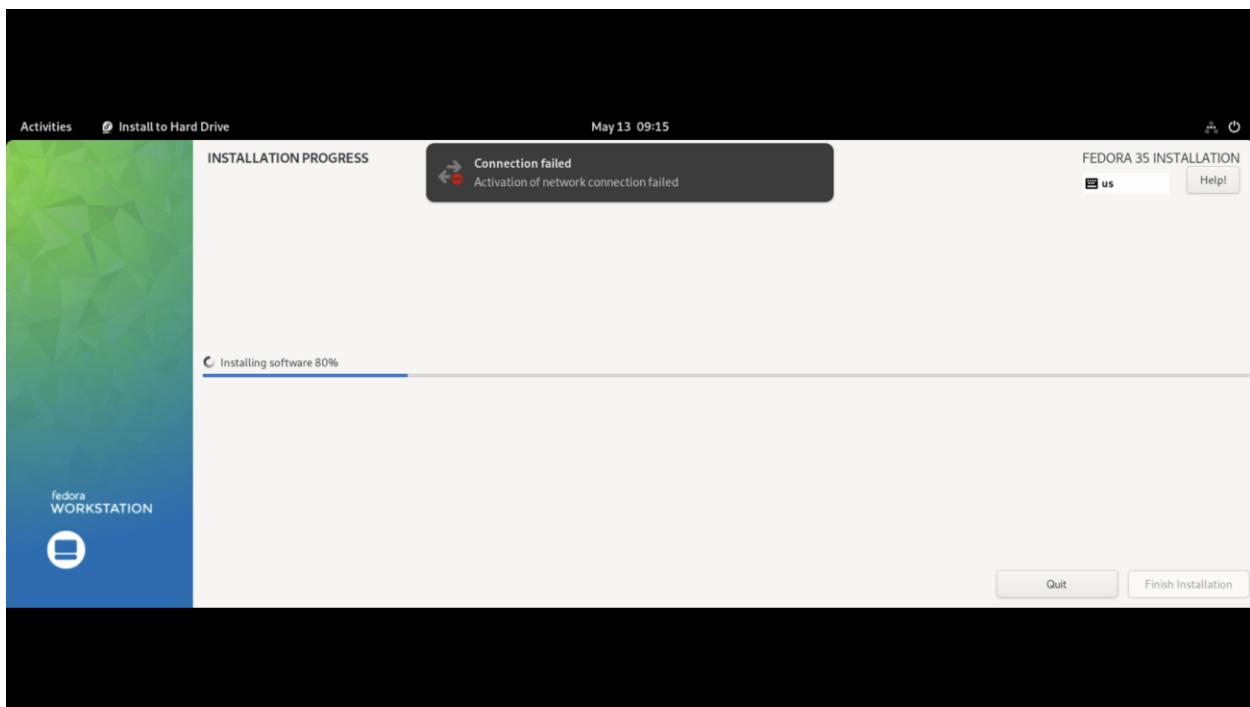
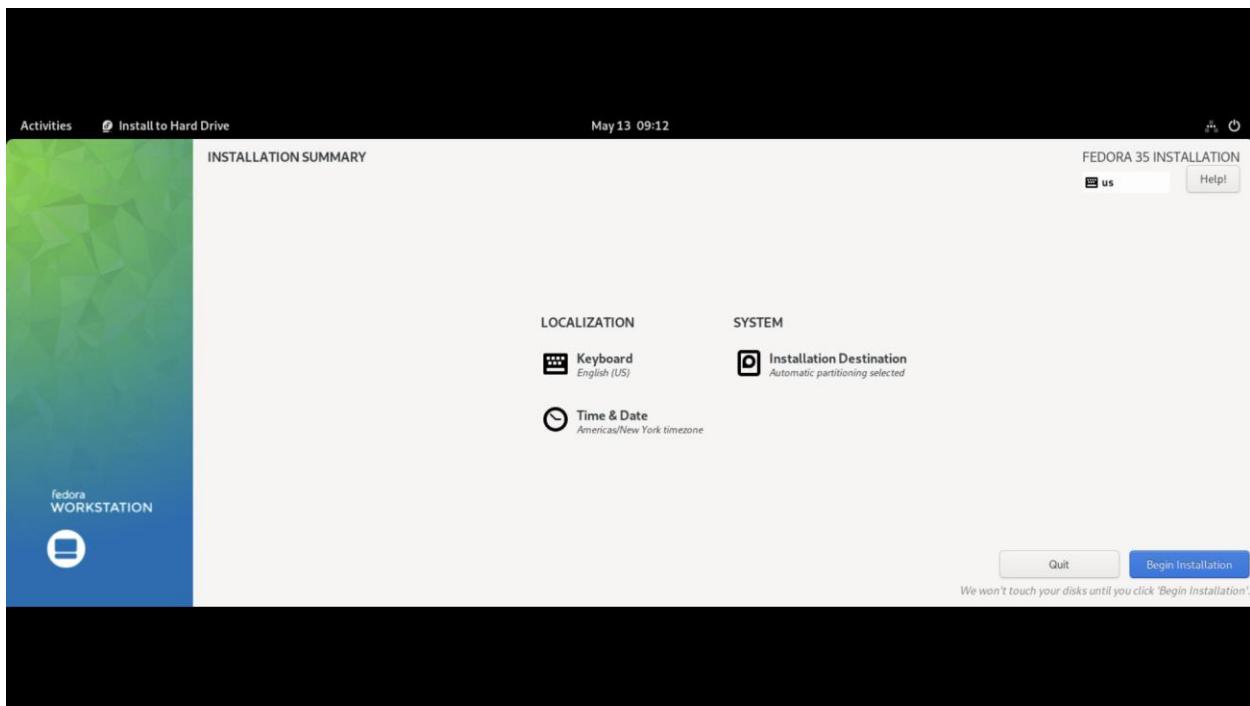




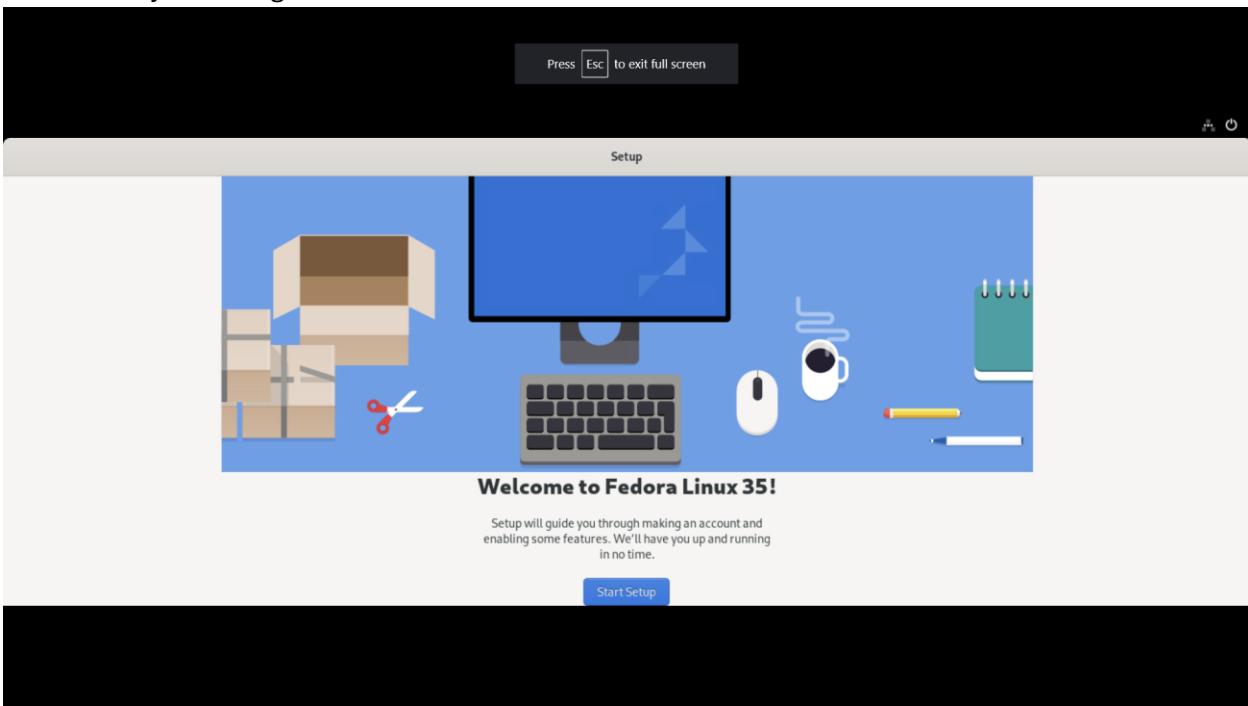
## Selecting Language as English



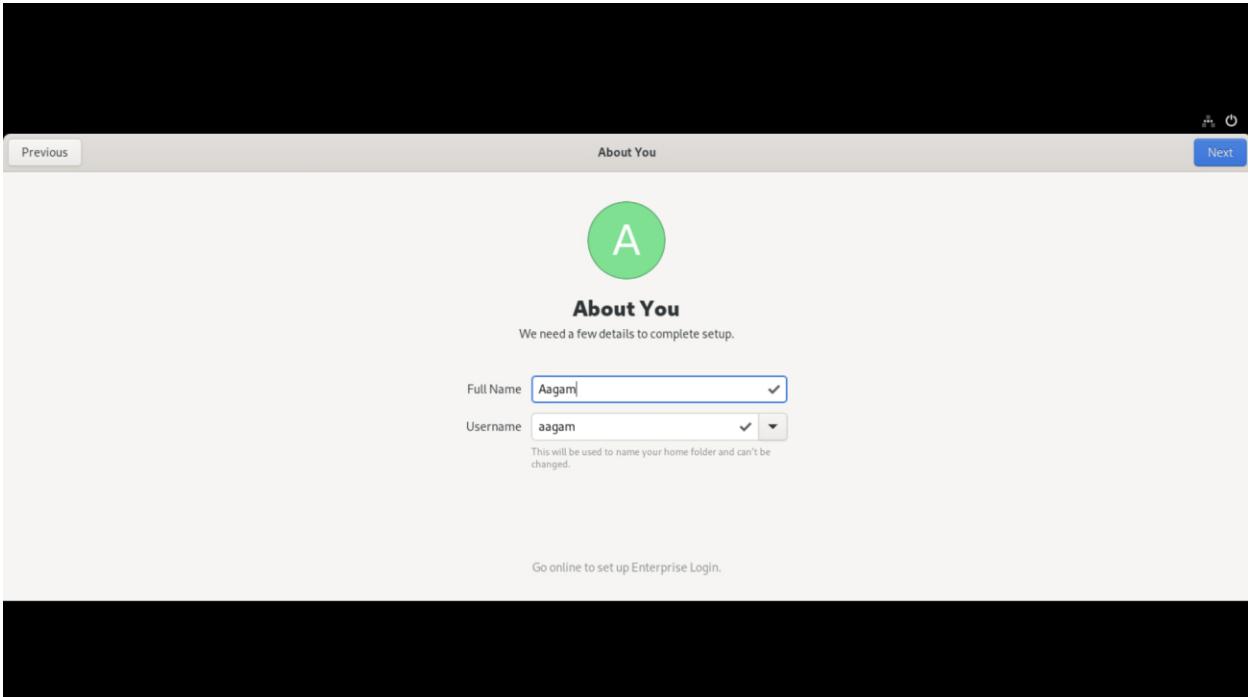




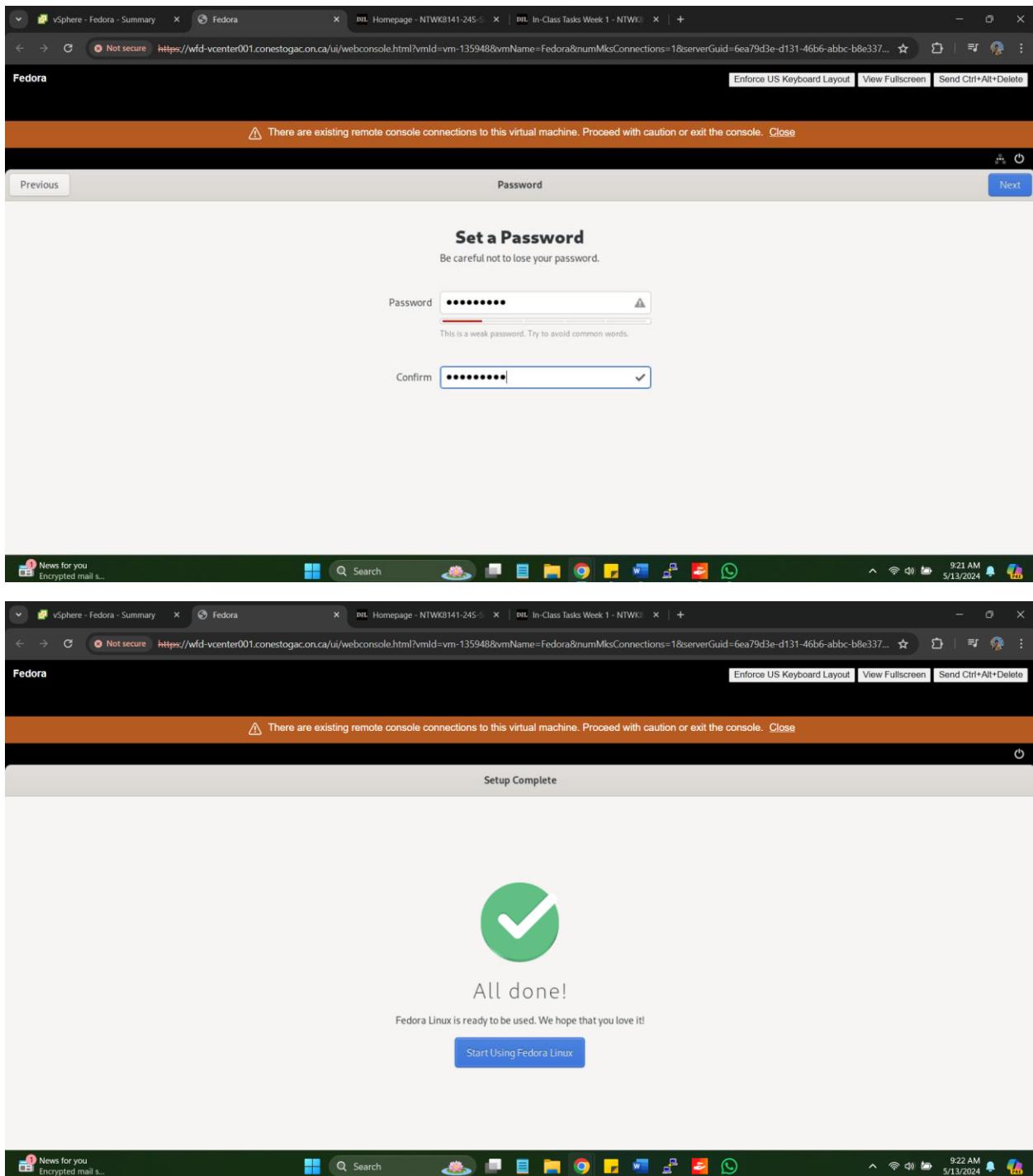
## Successfully installing Fedora OS

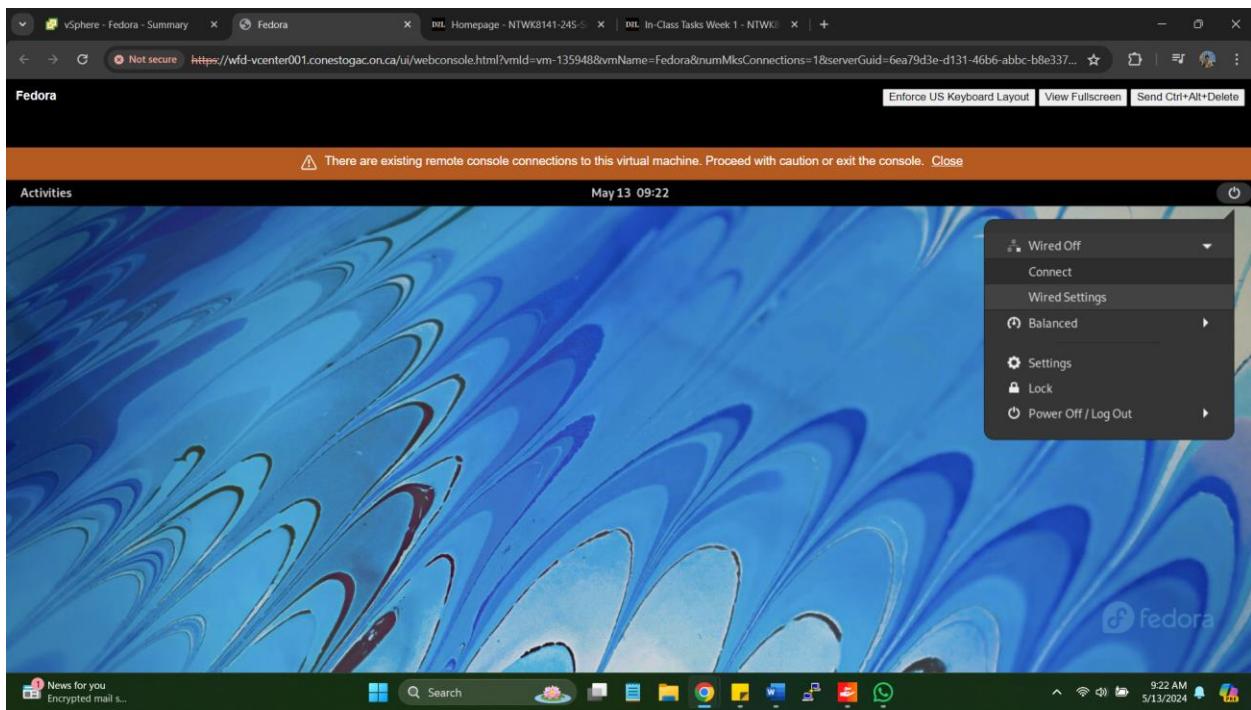


Username: Aagam (First name)

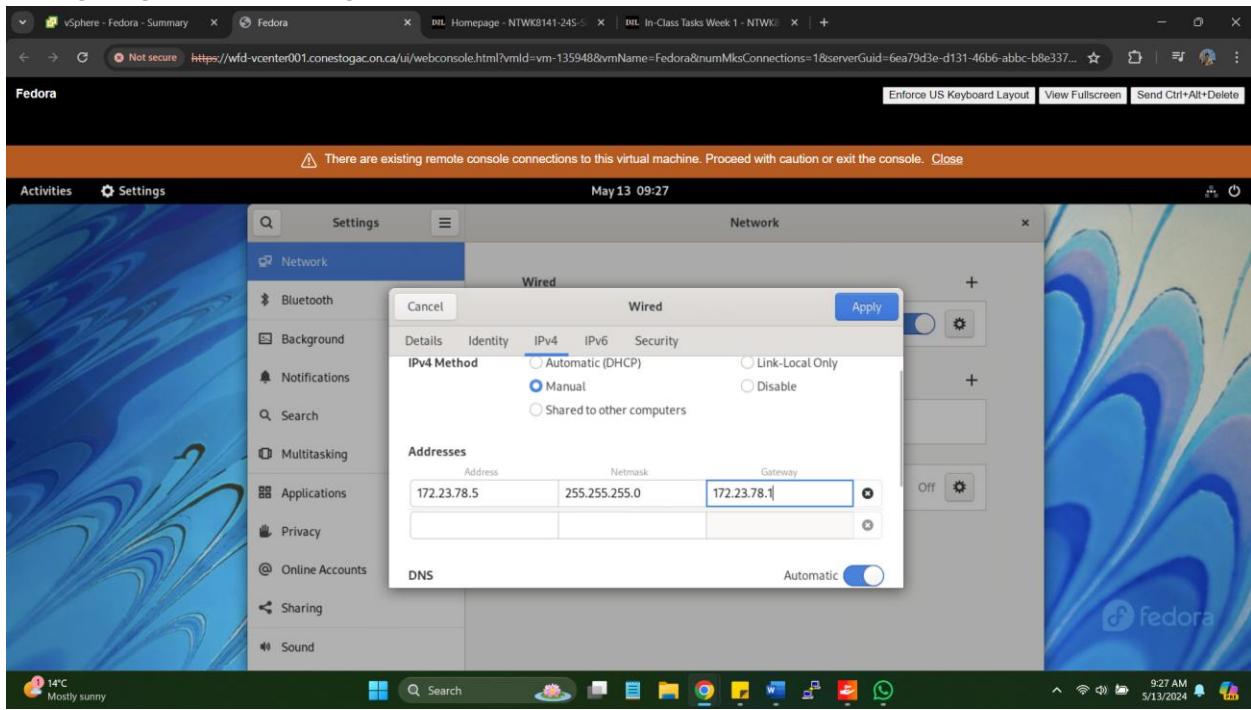


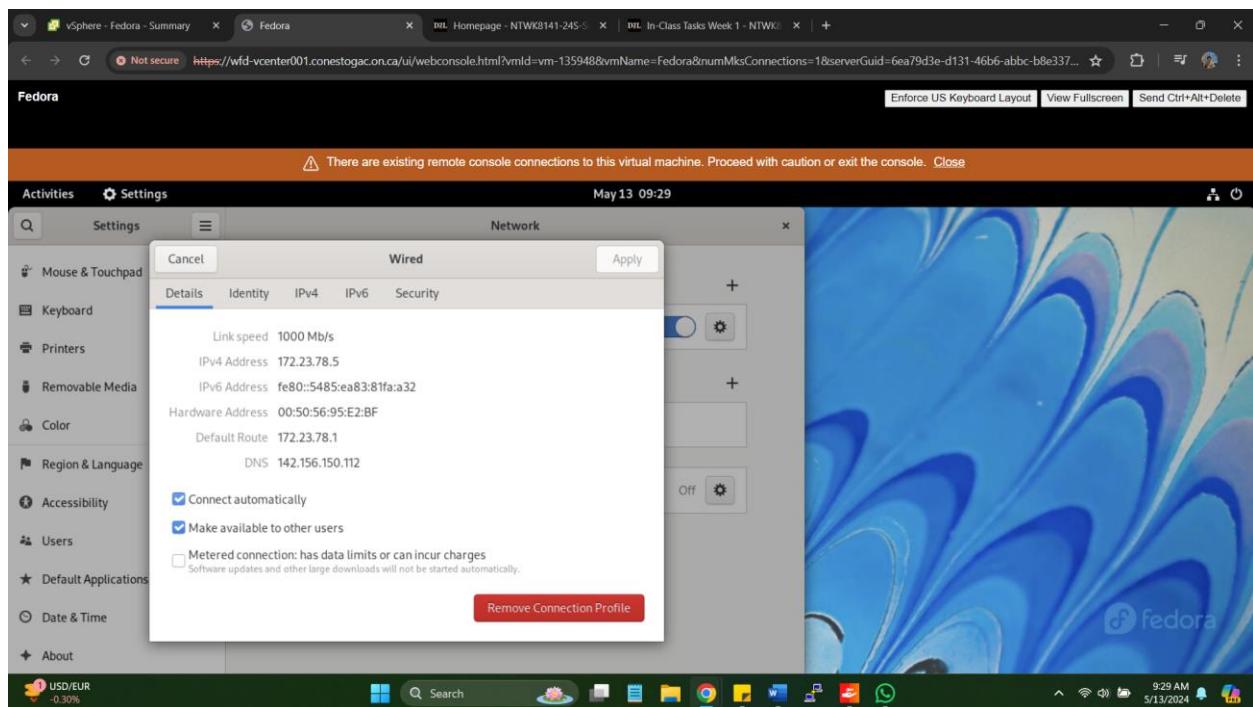
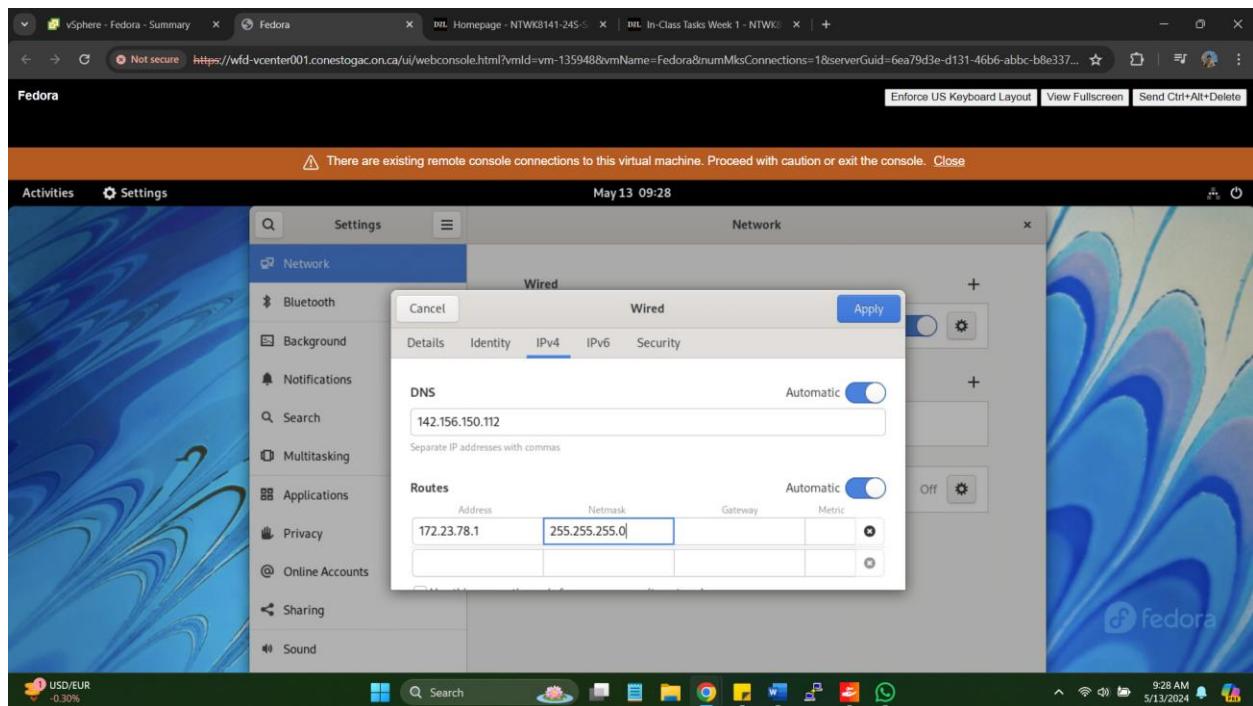
Password: Secret55!



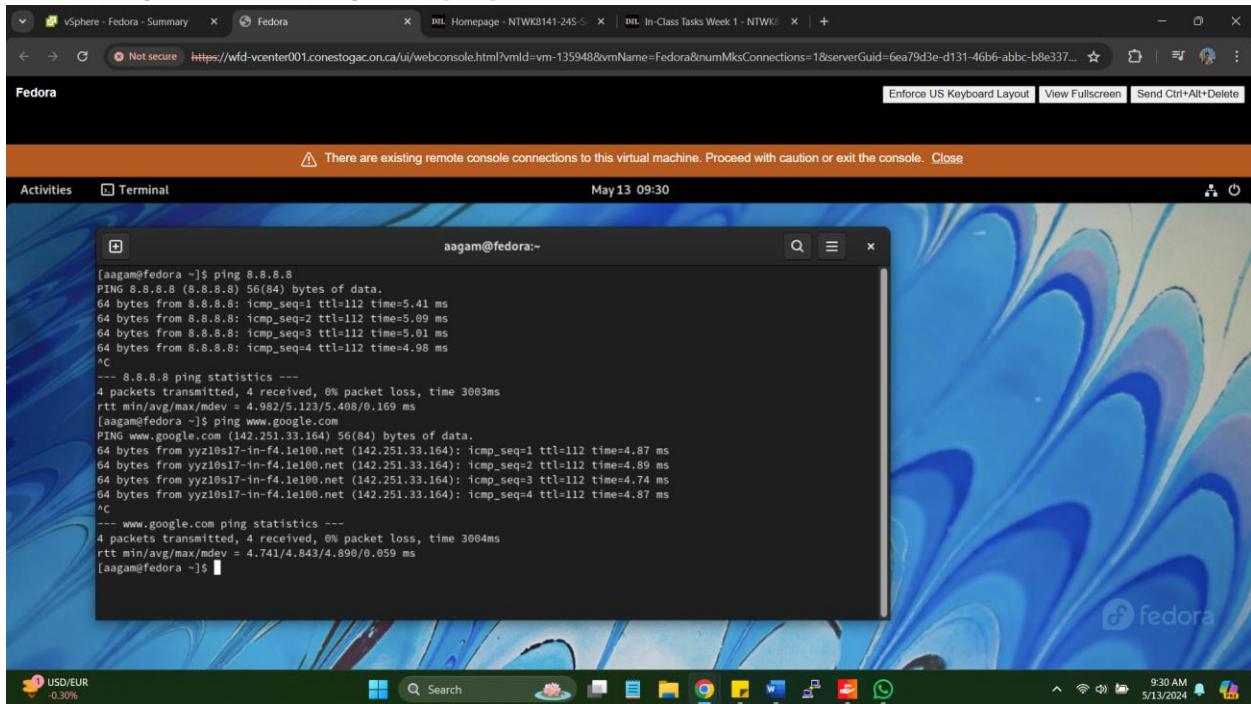


## Configuring Network setting with IP details: 172.23.78.5

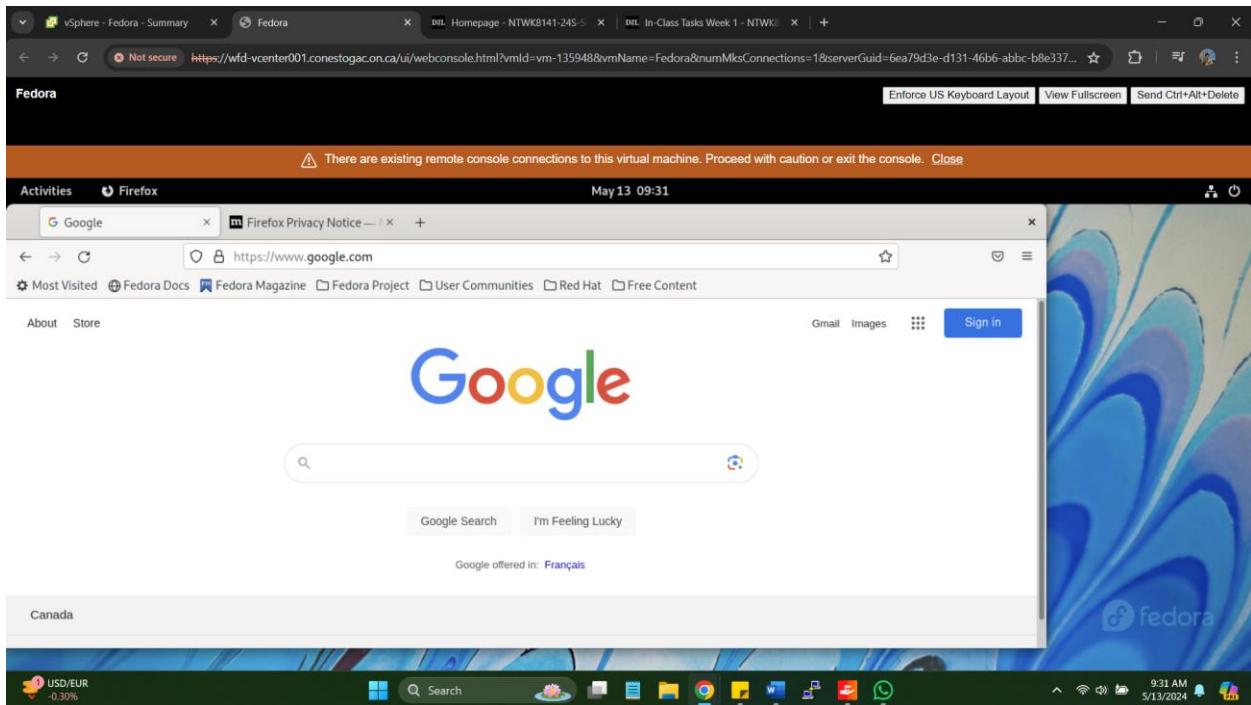




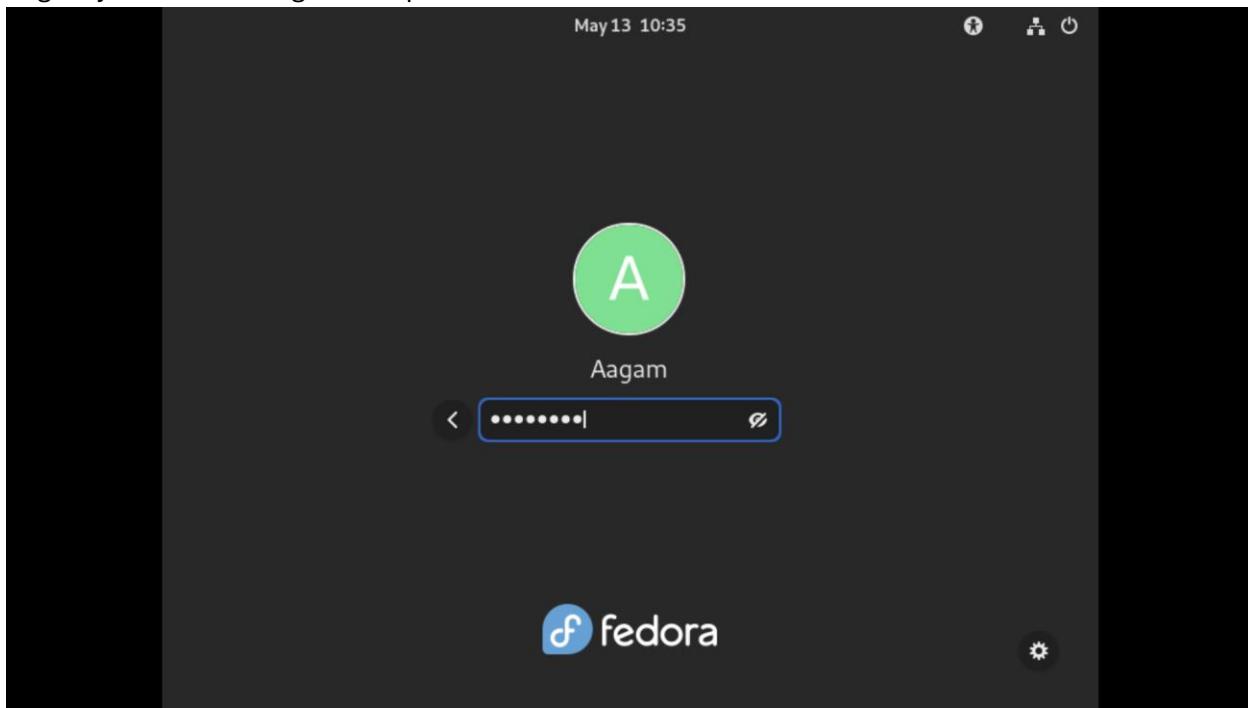
## Able to ping 8.8.8.8 and ping www.google.com



```
[aagam@fedora ~]$ ping 8.8.8.8
PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.
64 bytes from 8.8.8.8: icmp_seq=1 ttl=112 time=5.41 ms
64 bytes from 8.8.8.8: icmp_seq=2 ttl=112 time=5.09 ms
64 bytes from 8.8.8.8: icmp_seq=3 ttl=112 time=5.01 ms
64 bytes from 8.8.8.8: icmp_seq=4 ttl=112 time=4.98 ms
^C
--- 8.8.8.8 ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3003ms
rtt min/avg/max/mdev = 4.982/5.123/5.408/0.169 ms
[aagam@fedora ~]$ ping www.google.com
PING www.google.com (142.251.33.164) 56(84) bytes of data.
64 bytes from yyy10s17-in-f4.1e1e00.net (142.251.33.164): icmp_seq=1 ttl=112 time=4.87 ms
64 bytes from yyy10s17-in-f4.1e1e00.net (142.251.33.164): icmp_seq=2 ttl=112 time=4.89 ms
64 bytes from yyy10s17-in-f4.1e1e00.net (142.251.33.164): icmp_seq=3 ttl=112 time=4.74 ms
64 bytes from yyy10s17-in-f4.1e1e00.net (142.251.33.164): icmp_seq=4 ttl=112 time=4.87 ms
^C
--- www.google.com ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3004ms
rtt min/avg/max/mdev = 4.741/4.843/4.890/0.059 ms
[aagam@fedora ~]$
```

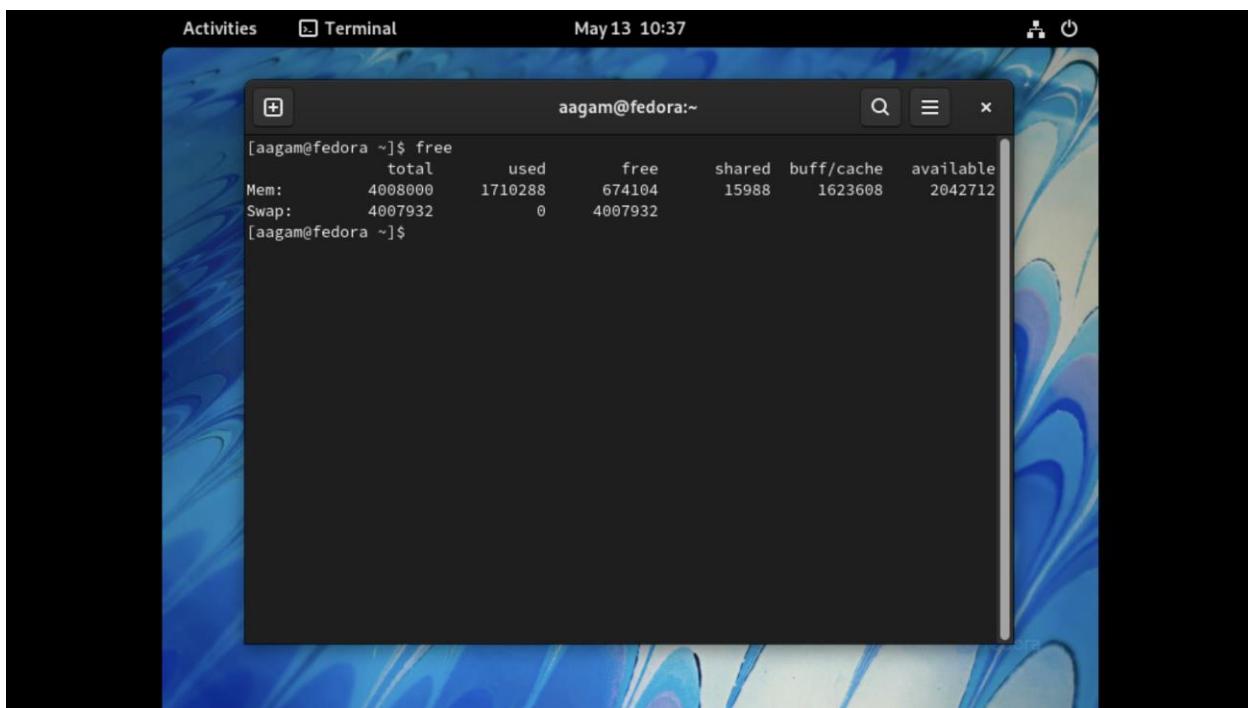


Login by username: Aagam and password



scenarios “Looking at Memory” and “Examining Processes

Command: free



Command: cat /proc/meminfo

```
Activities Terminal May 13 10:39
[+] aagam@fedora:~
```

```
[aagam@fedora ~]$ cat /proc/meminfo
MemTotal:        4008000 kB
MemFree:         114232 kB
MemAvailable:   1923068 kB
Buffers:          3888 kB
Cached:          1995588 kB
SwapCached:       0 kB
Active:          1336996 kB
Inactive:        2312400 kB
Active(anon):    1832 kB
Inactive(anon): 1666220 kB
Active(file):   1335164 kB
Inactive(file): 646180 kB
Unevictable:     4068 kB
Mlocked:         4068 kB
SwapTotal:      4007932 kB
SwapFree:       4007932 kB
Dirty:           56840 kB
Writeback:        0 kB
AnonPages:      1653904 kB
Mapped:          287336 kB
Shmem:           14840 kB
KReclaimable:   63760 kB
Slab:            146336 kB
```

```
Activities Terminal May 13 10:39
[+] aagam@fedora:~
```

```
[aagam@fedora ~]$ cat /proc/meminfo
CommitLimit:    6011932 kB
Committed_AS:   4456764 kB
VmallocTotal:   34359738367 kB
VmallocUsed:    41428 kB
VmallocChunk:    0 kB
Percpu:          1728 kB
HardwareCorrupted: 0 kB
AnonHugePages:   0 kB
ShmemHugePages:  0 kB
ShmemPmdMapped: 0 kB
FileHugePages:   0 kB
FilePmdMapped:   0 kB
CmaTotal:        0 kB
CmaFree:         0 kB
HugePages_Total: 0
HugePages_Free:  0
HugePages_Rsvd:  0
HugePages_Surp:  0
Hugepagesize:    2048 kB
Hugetlb:          0 kB
DirectMap4k:     194432 kB
DirectMap2M:     2951168 kB
DirectMap1G:     3145728 kB
[aagam@fedora ~]$
```

Command: ps ax

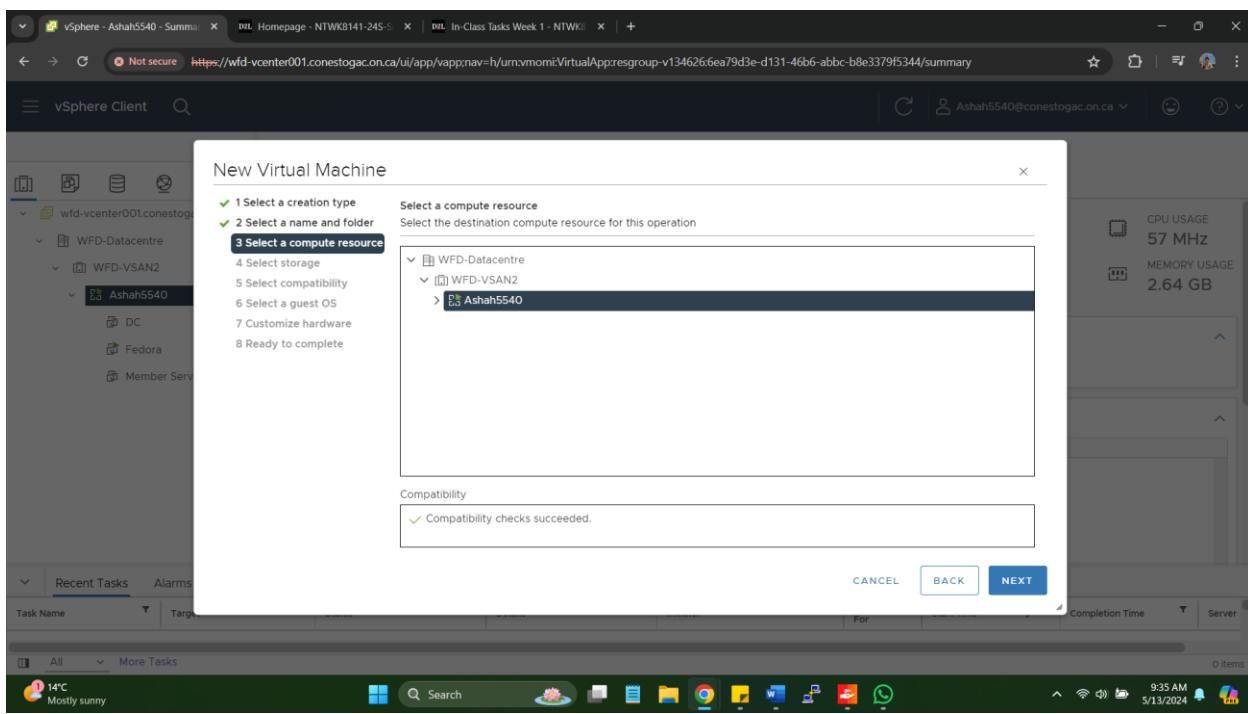
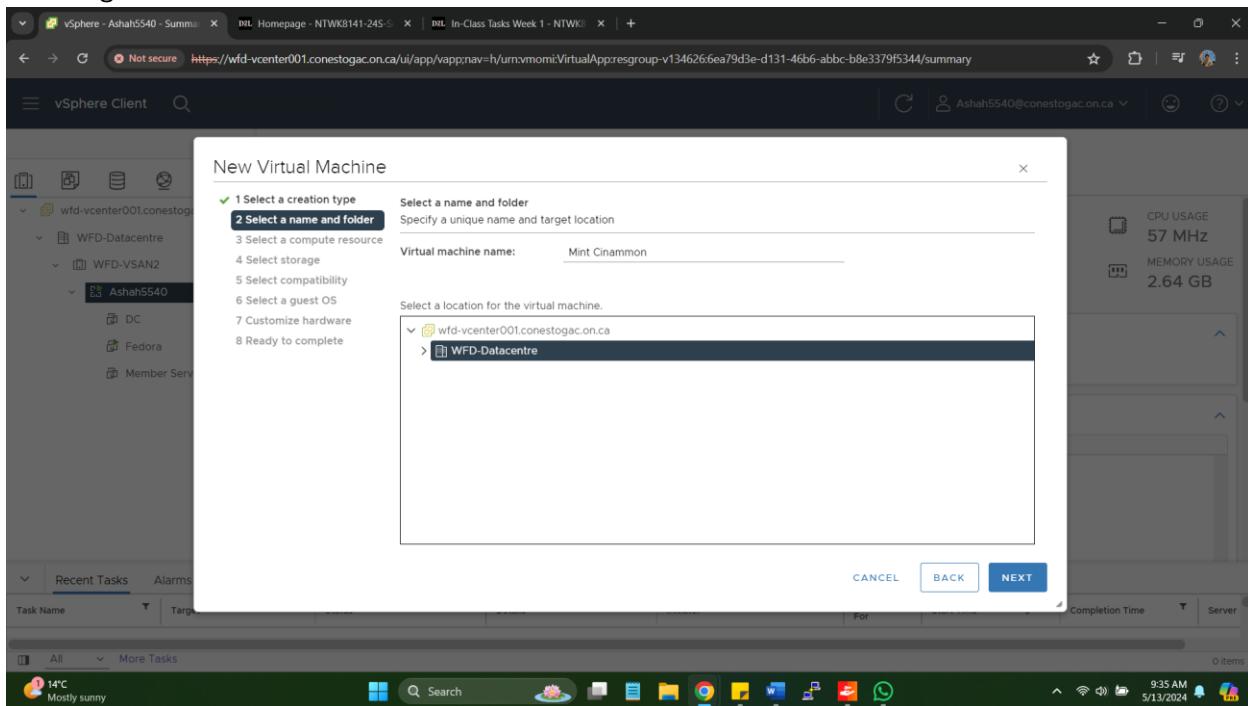
The image consists of two vertically stacked screenshots of a Linux desktop environment. Both screenshots show a terminal window titled 'Terminal' with the command 'ps ax' running. The terminal window has a dark background and light-colored text. The top screenshot shows the initial output of the command, listing processes from PID 1 to 23. The bottom screenshot shows the output continuing from PID 2727 to 3008, with the command 'ps ax' visible again at the bottom.

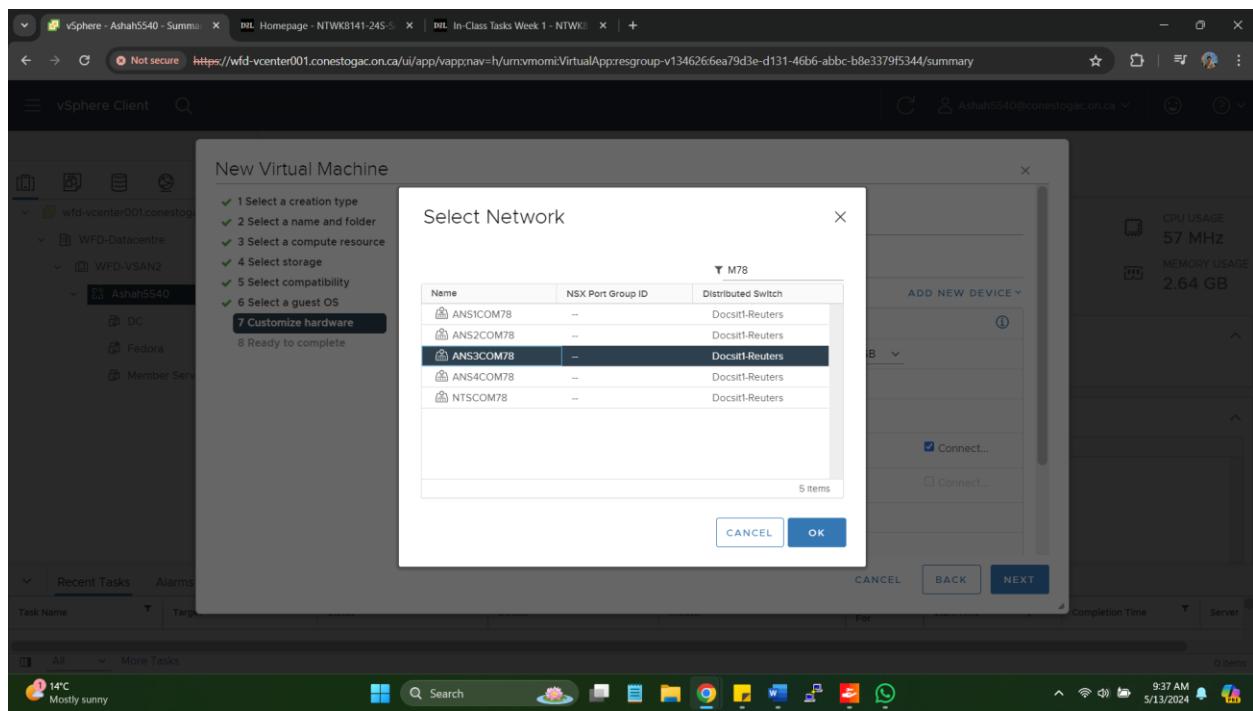
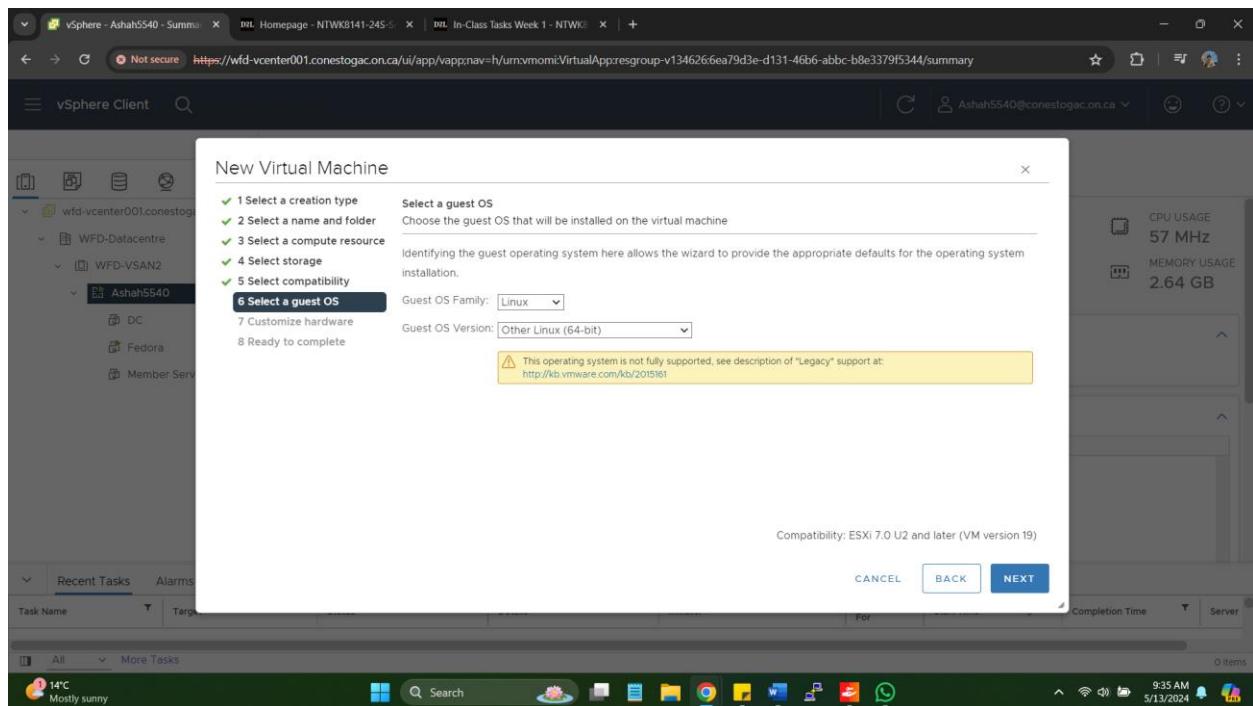
```
[aagam@fedora ~]$ ps ax
  PID TTY      STAT   TIME COMMAND
    1 ?        Ss     0:00 /usr/lib/systemd/systemd rhgb --switched-root --sys
    2 ?        S      0:00 [kthreadd]
    3 ?        I<    0:00 [rcu_gp]
    4 ?        I<    0:00 [rcu_par_gp]
    5 ?        I      0:00 [kworker/0:0-events]
    6 ?        I<    0:00 [kworker/0:0H-events_highpri]
    8 ?        I      0:00 [kworker/u4:0-btrfs-endio]
    9 ?        I<    0:00 [mm_percpu_wq]
   10 ?       S      0:00 [rcu_tasks_kthre]
   11 ?       S      0:00 [rcu_tasks_rude_]
   12 ?       S      0:00 [rcu_tasks_trace]
   13 ?       S      0:00 [ksoftirqd/0]
   14 ?       I      0:00 [rcu_sched]
   15 ?       S      0:00 [migration/0]
   16 ?       S      0:00 [cpuhp/0]
   17 ?       S      0:00 [cpuhp/1]
   18 ?       S      0:00 [migration/1]
   19 ?       S      0:00 [ksoftirqd/1]
   20 ?       I      0:00 [kworker/1:0-events]
   21 ?       I<    0:00 [kworker/1:0H-events_highpri]
   22 ?       S      0:00 [kdevtmpfs]
   23 ?       I<    0:00 [netns]

[aagam@fedora ~]$ ps ax
 2727 ?      Ssl    0:00 gpg-agent --homedir /var/cache/PackageKit/36/meta
 2729 ?      Sll    0:00 scdaemon --multi-server --homedir /var/cache/Packag
 2752 ?      Ssl    0:00 gpg-agent --homedir /var/cache/PackageKit/36/meta
 2754 ?      Sll    0:00 scdaemon --multi-server --homedir /var/cache/Packag
 2765 ?      Ssl    0:00 gpg-agent --homedir /var/cache/PackageKit/36/meta
 2767 ?      Sll    0:00 scdaemon --multi-server --homedir /var/cache/Packag
 2801 ?      Ssl    0:00 gpg-agent --homedir /var/cache/PackageKit/37/meta
 2803 ?      Sll    0:00 scdaemon --multi-server --homedir /var/cache/Packag
 2816 ?      Ssl    0:00 gpg-agent --homedir /var/cache/PackageKit/37/meta
 2818 ?      Sll    0:00 scdaemon --multi-server --homedir /var/cache/Packag
 2831 ?      Ssl    0:00 gpg-agent --homedir /var/cache/PackageKit/37/meta
 2833 ?      Sll    0:00 scdaemon --multi-server --homedir /var/cache/Packag
 2846 ?      Ssl    0:00 gpg-agent --homedir /var/cache/PackageKit/37/meta
 2848 ?      Sll    0:00 scdaemon --multi-server --homedir /var/cache/Packag
 2869 ?      Ssl    0:00 gpg-agent --homedir /var/cache/PackageKit/37/meta
 2871 ?      Sll    0:00 scdaemon --multi-server --homedir /var/cache/Packag
 2879 ?      S      0:00 systemd-userwork
 2888 ?      Ssl    0:00 gpg-agent --homedir /var/cache/PackageKit/37/meta
 2890 ?      Sll    0:00 scdaemon --multi-server --homedir /var/cache/Packag
 2902 ?      Ssl    0:00 gpg-agent --homedir /var/cache/PackageKit/37/meta
 2904 ?      Sll    0:00 scdaemon --multi-server --homedir /var/cache/Packag
 2951 ?      S      0:00 systemd-userwork
 3008 pts/0   R+    0:00 ps ax
[aagam@fedora ~]$
```

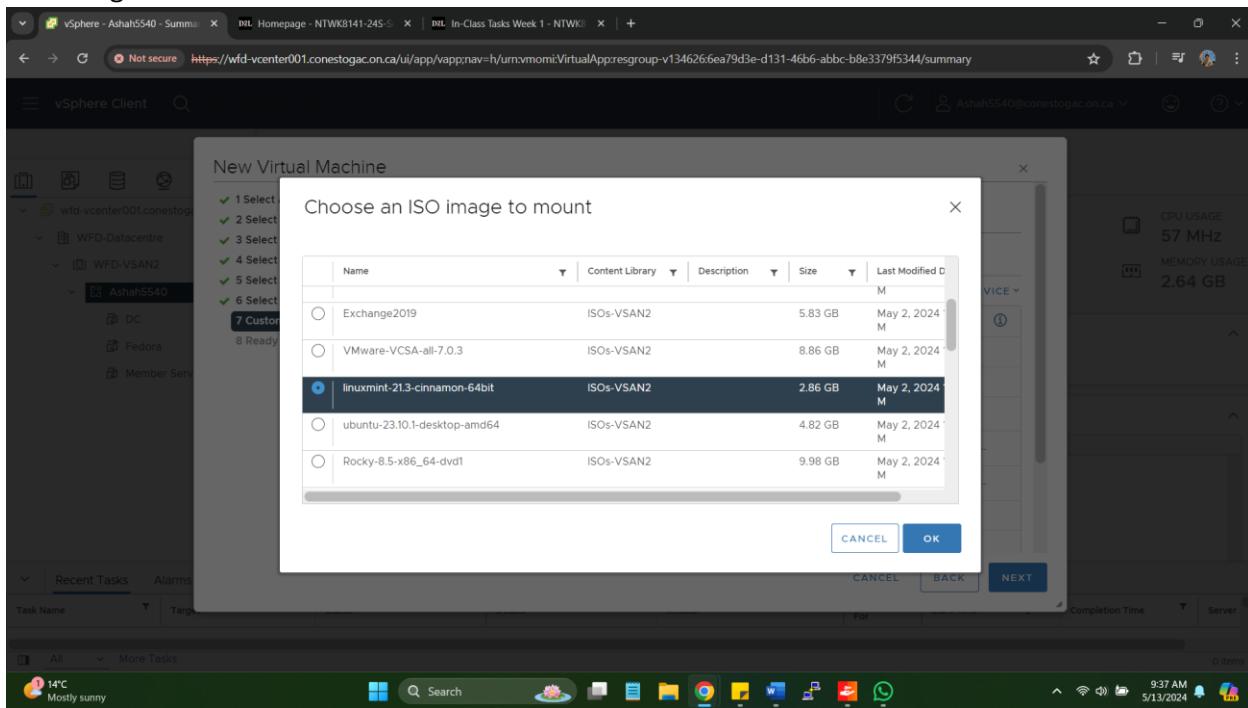
### 3. Installation of Linux Mint Cinnamon

## Creating VM for Linux Mint Cinnamon OS installation.

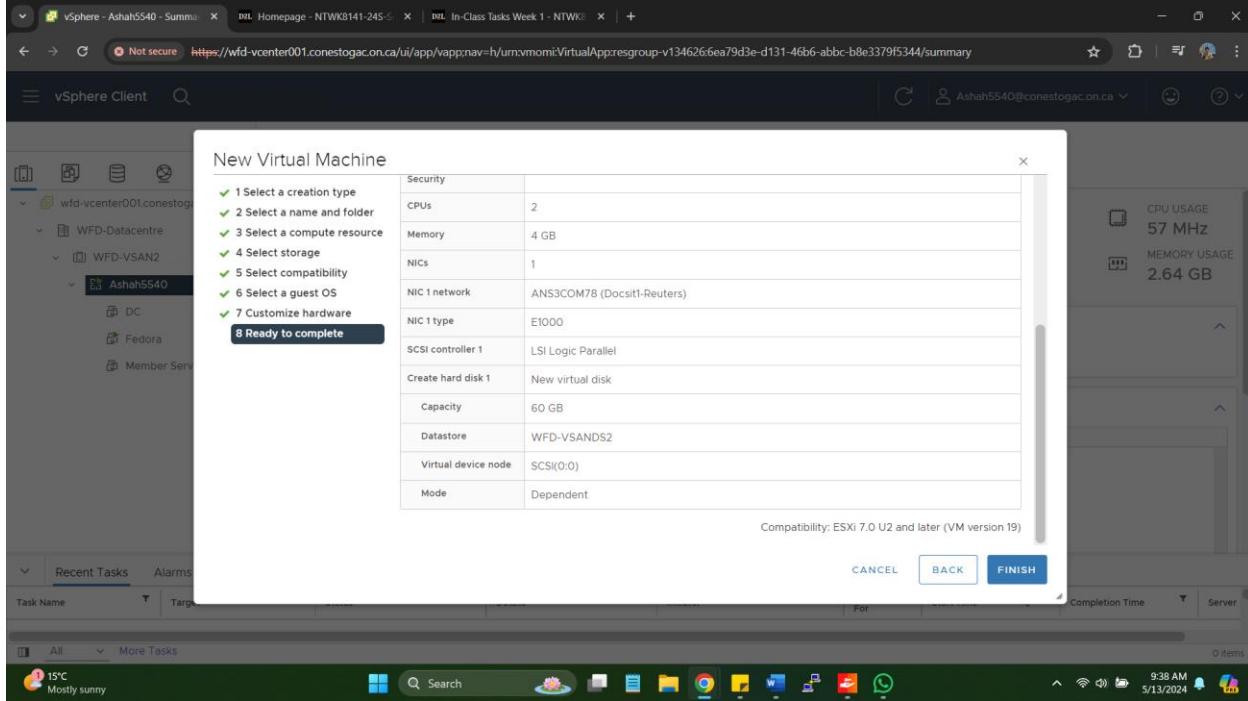
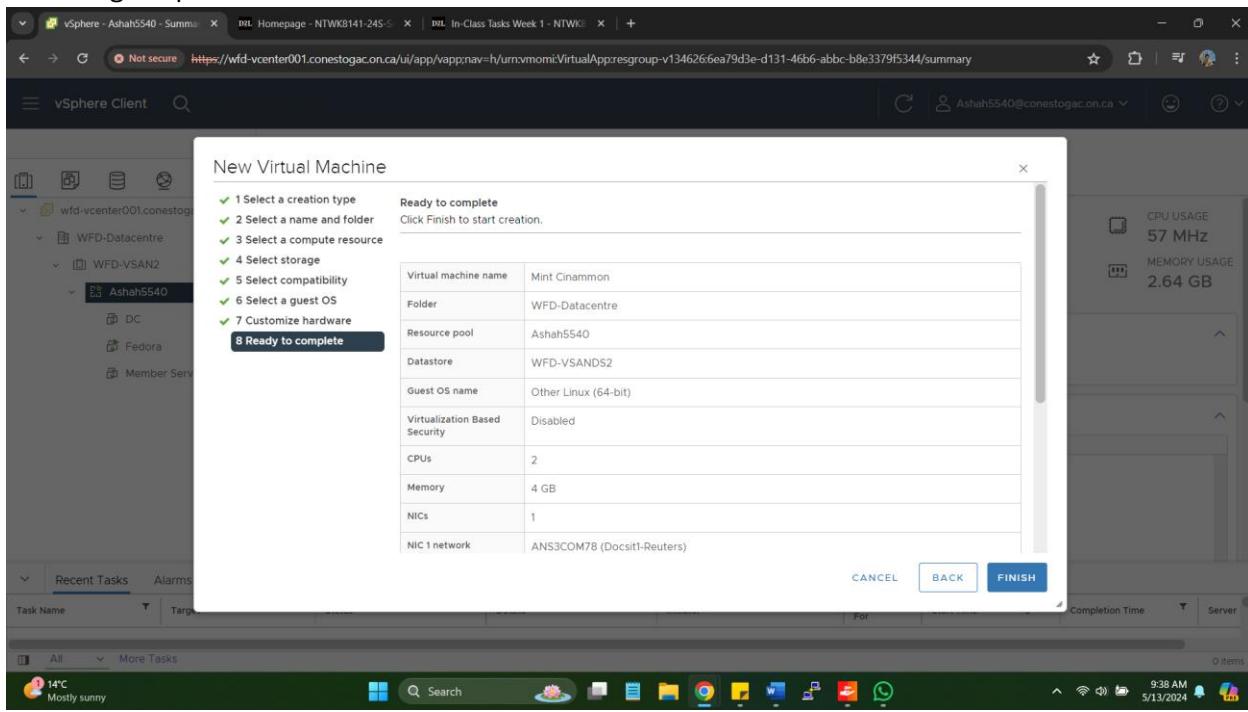




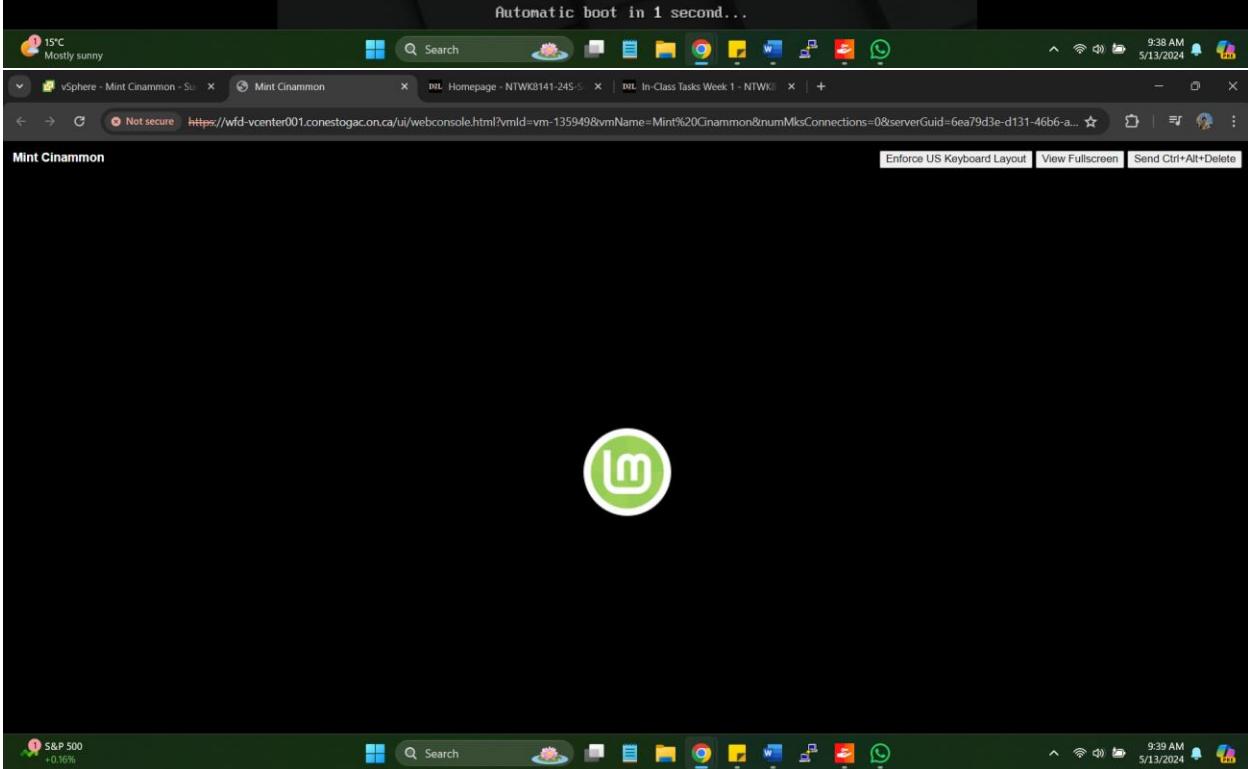
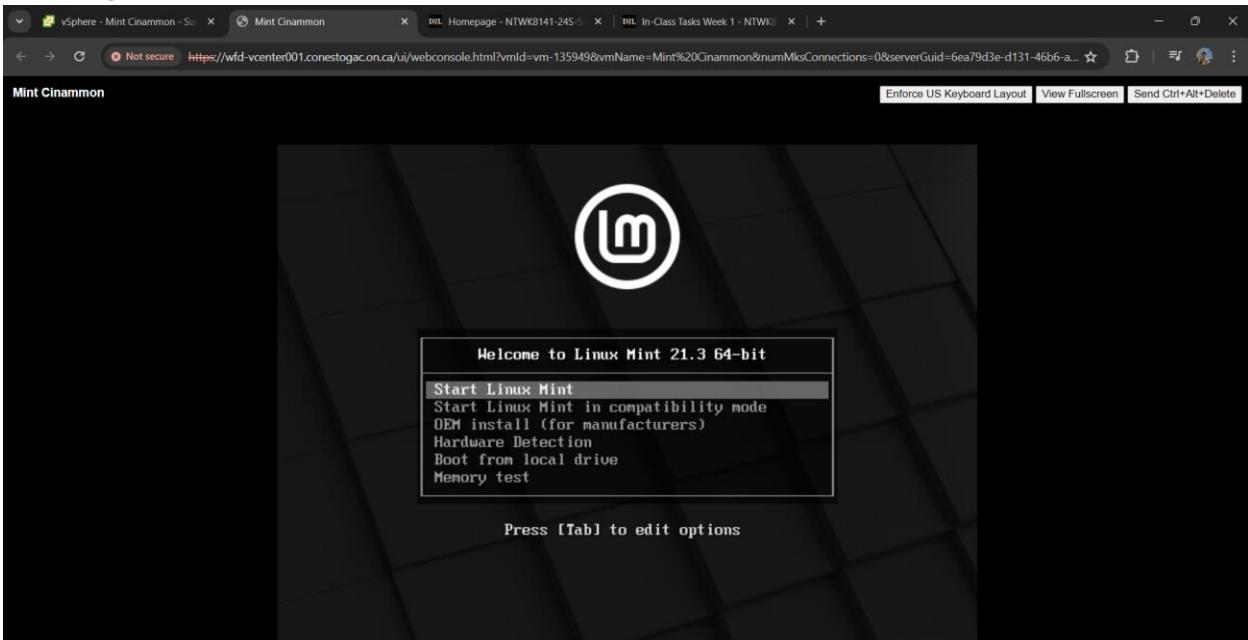
## Selecting ISO to mount as linux mint

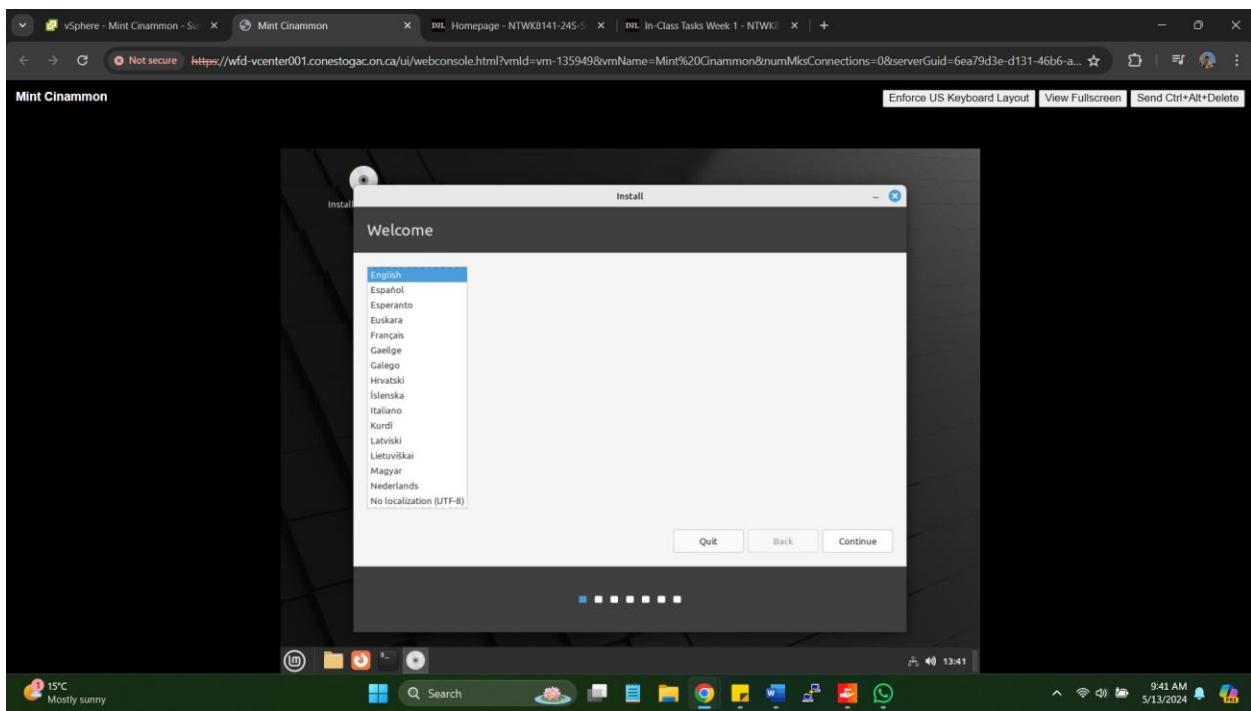
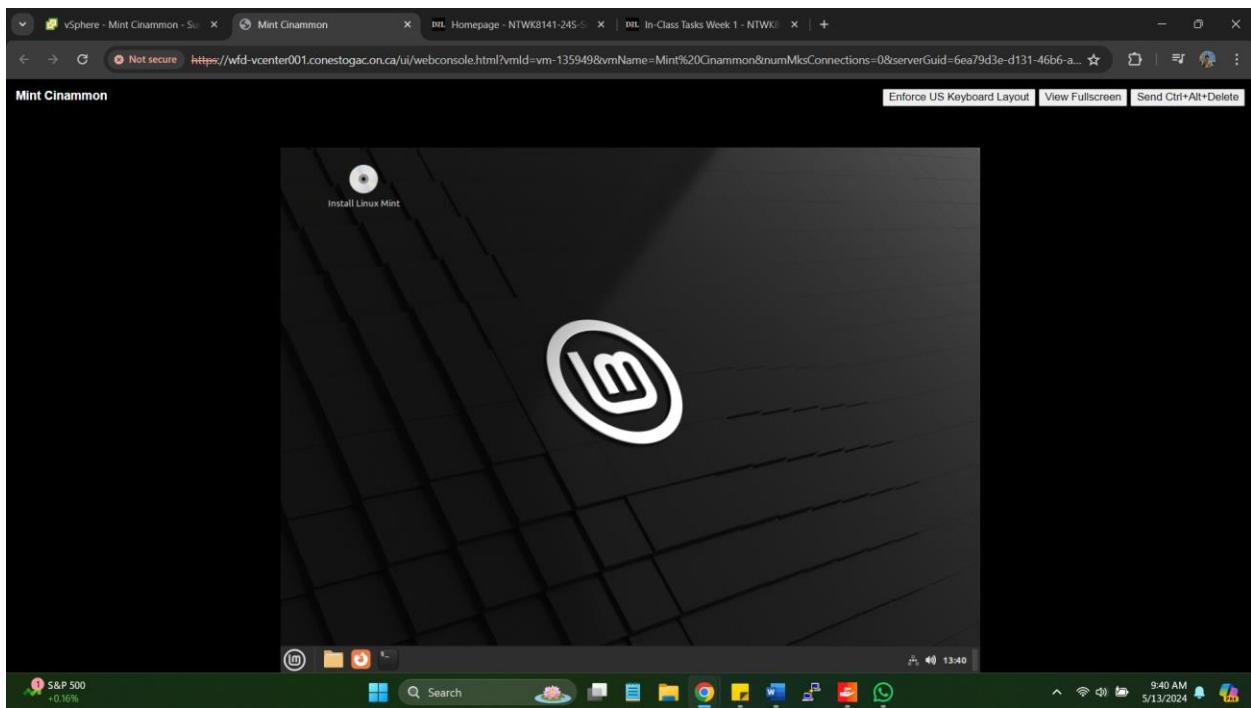


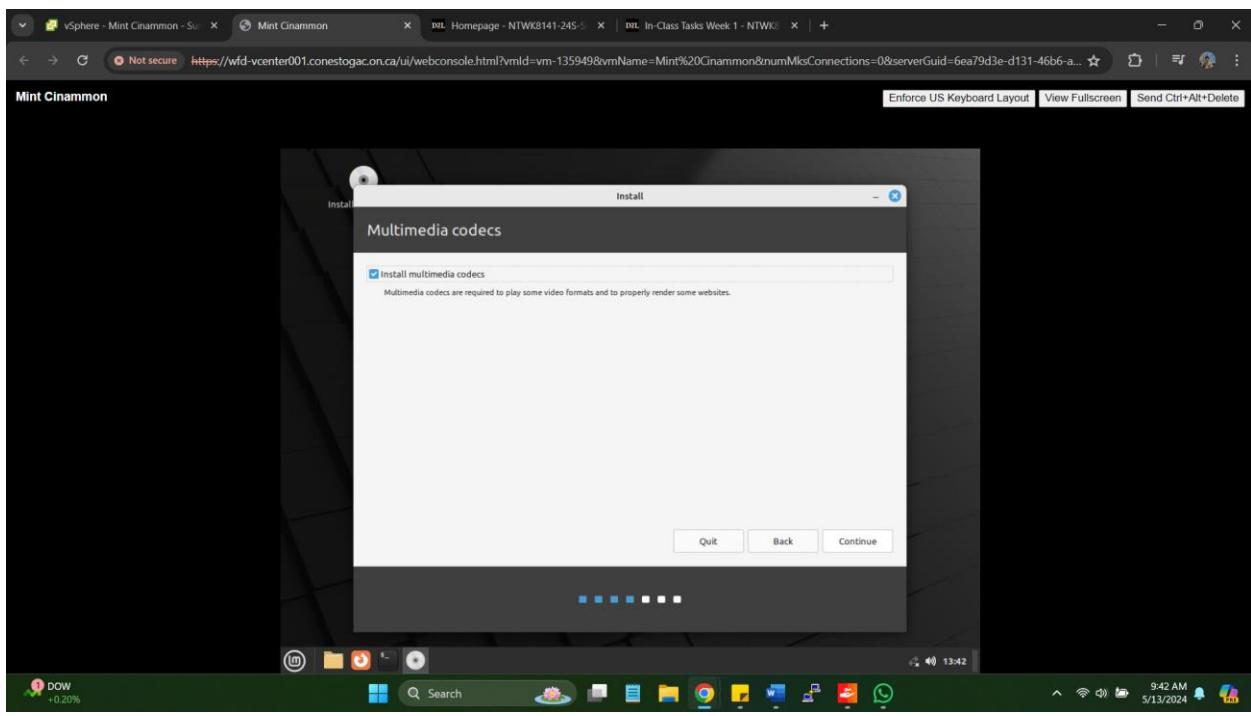
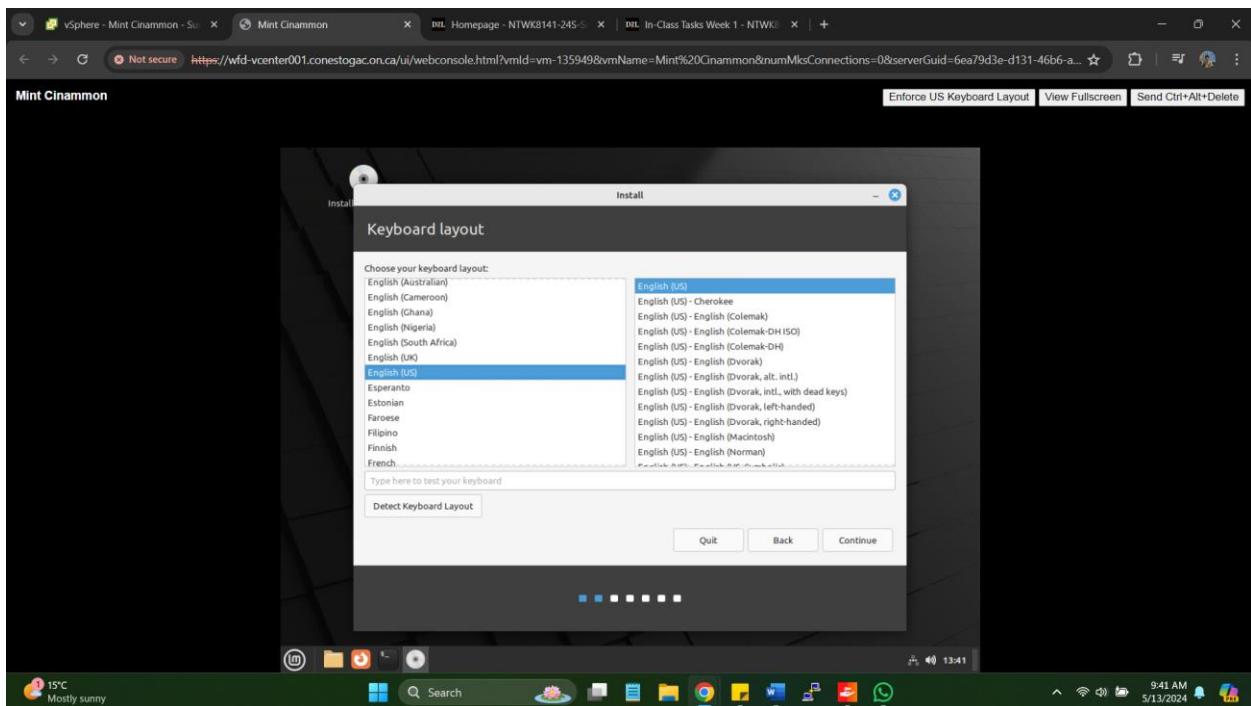
## Selecting of specification for VM installation

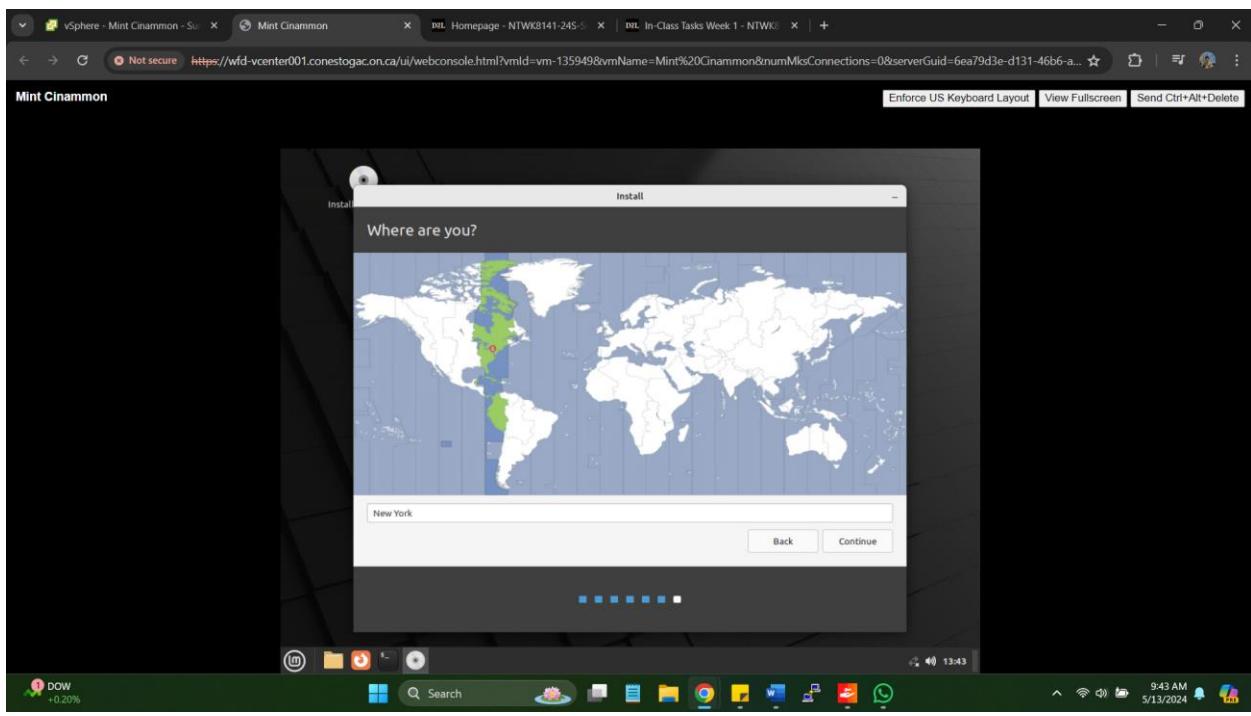
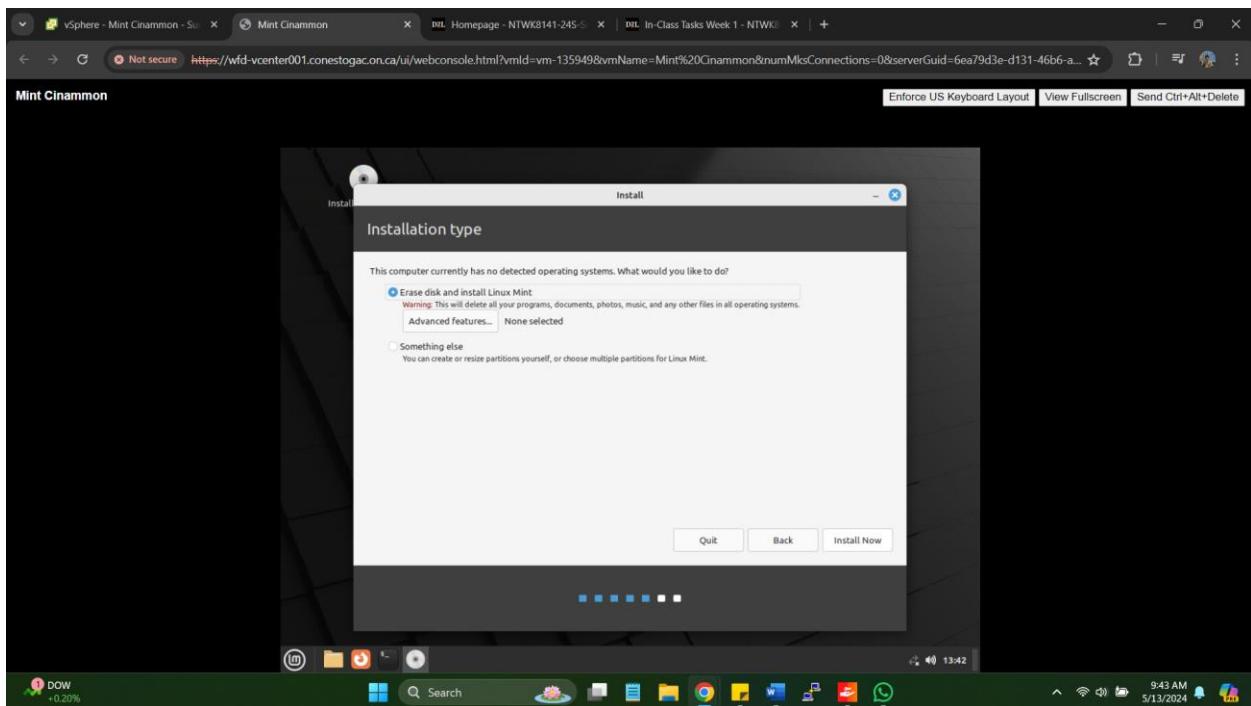


## Installing Linux Mint

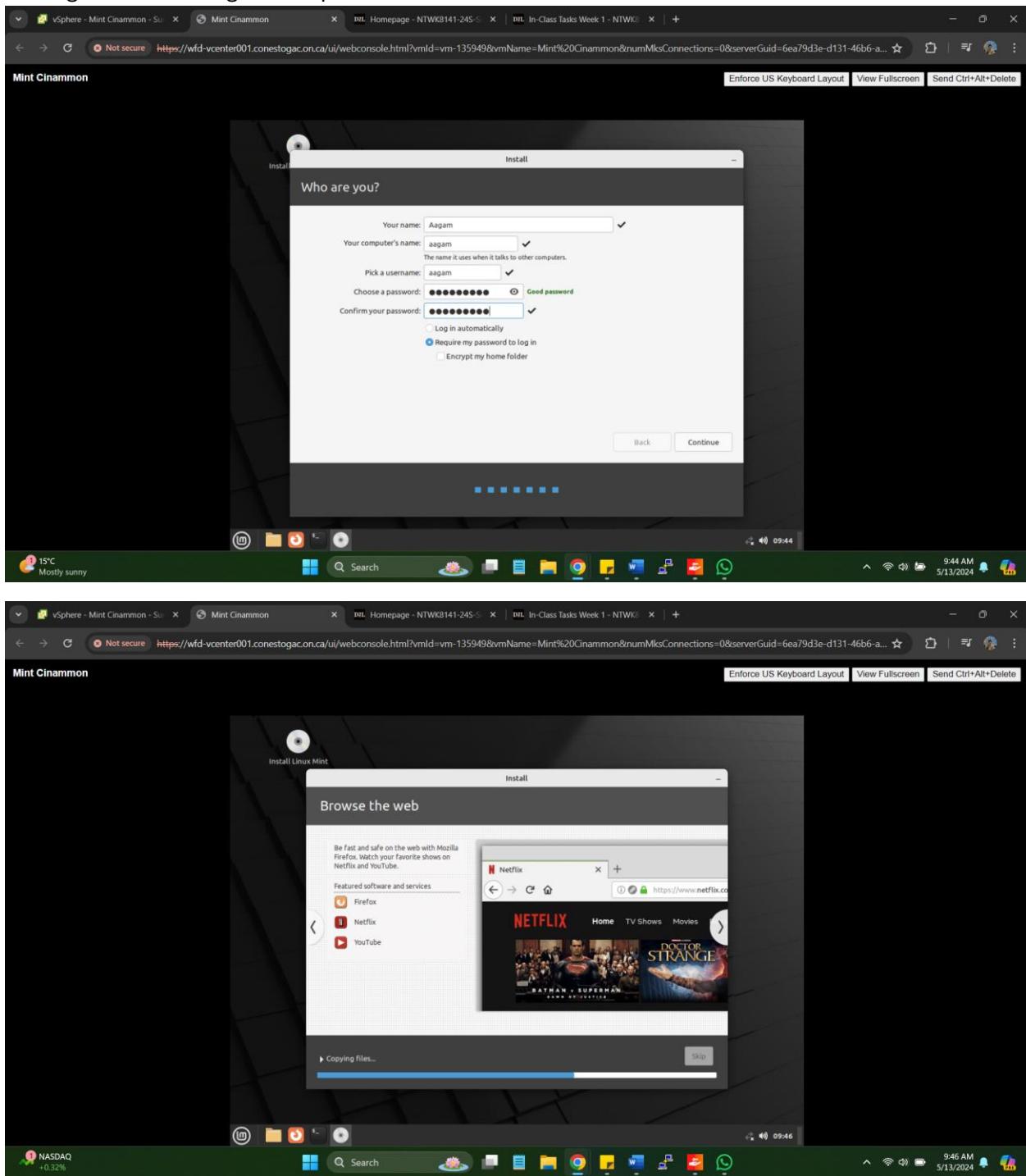


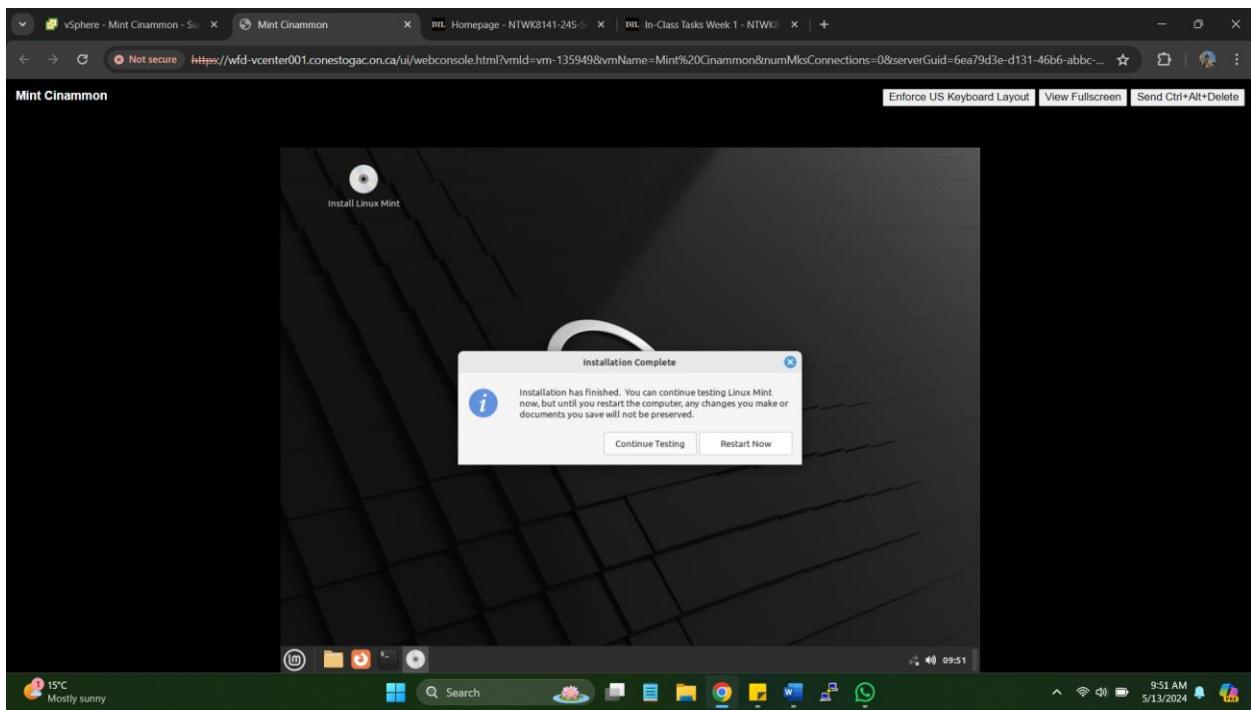




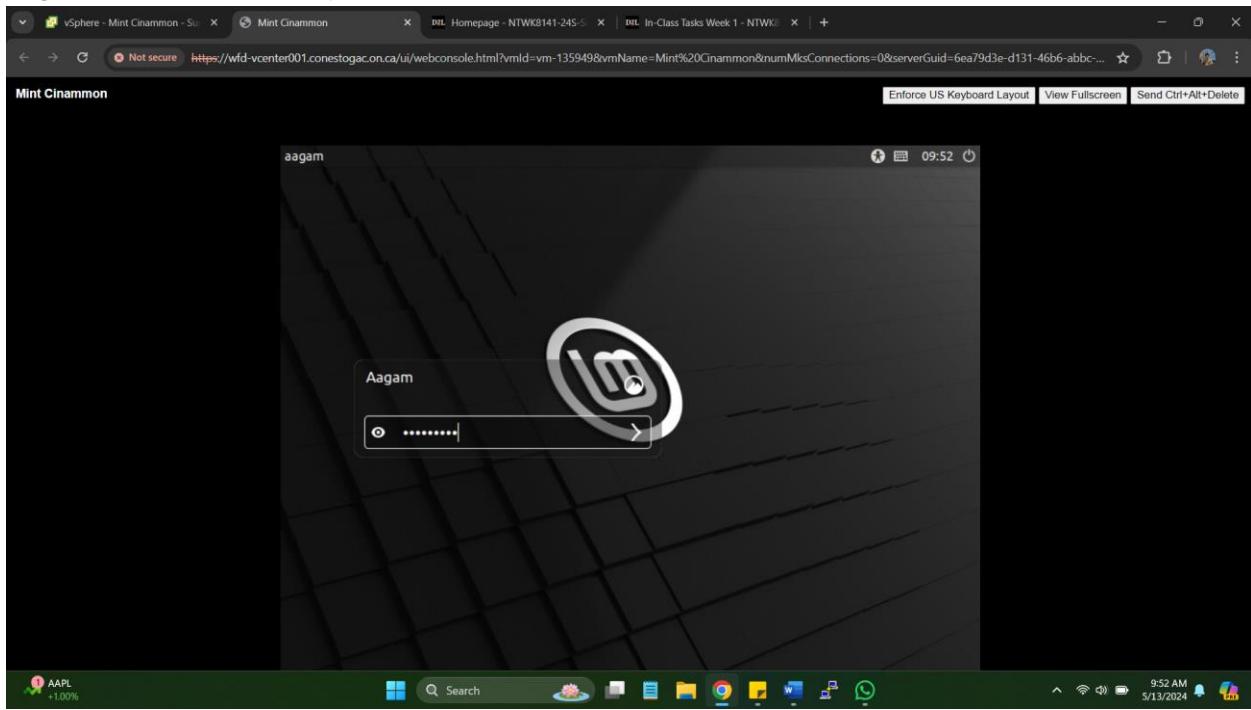


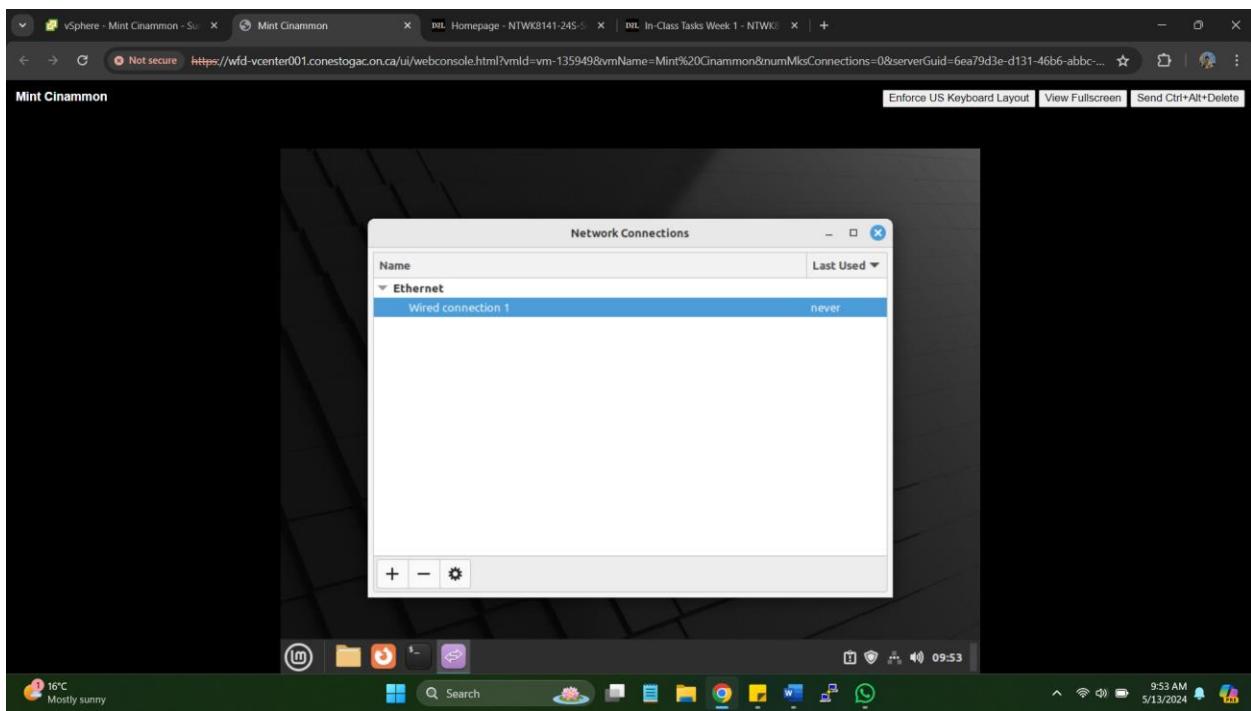
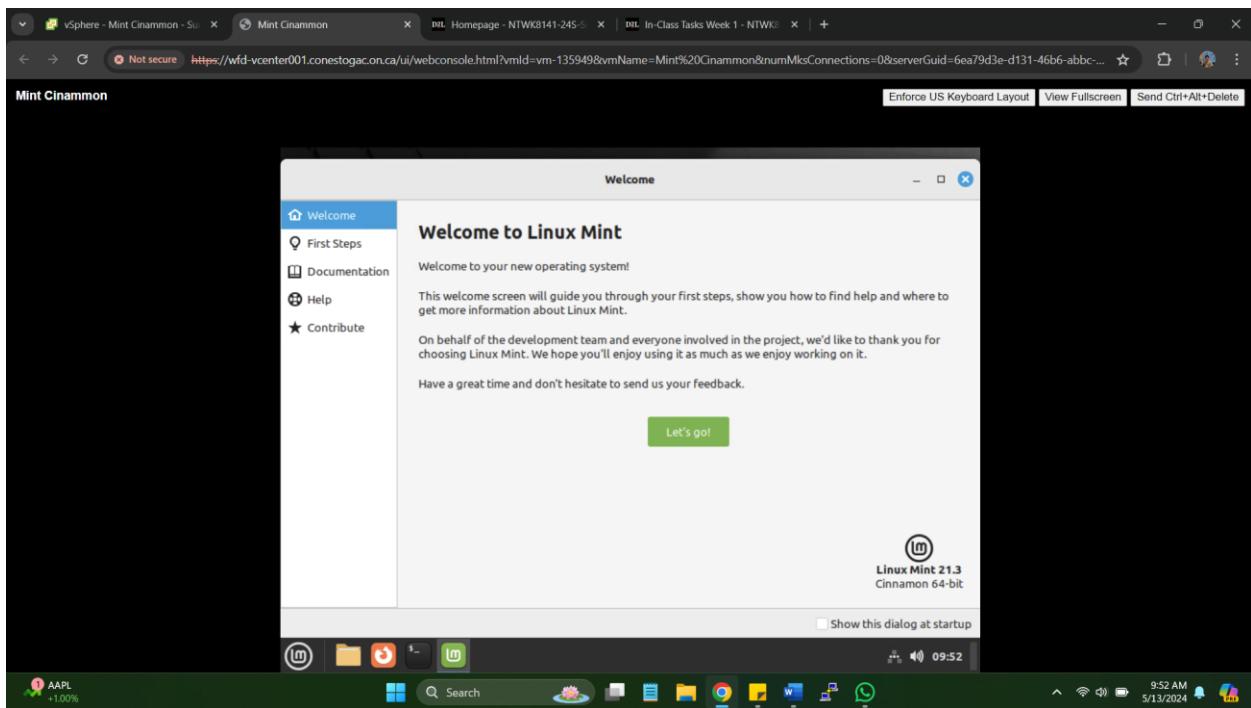
## Setting username: Aagam and password: Secret55!



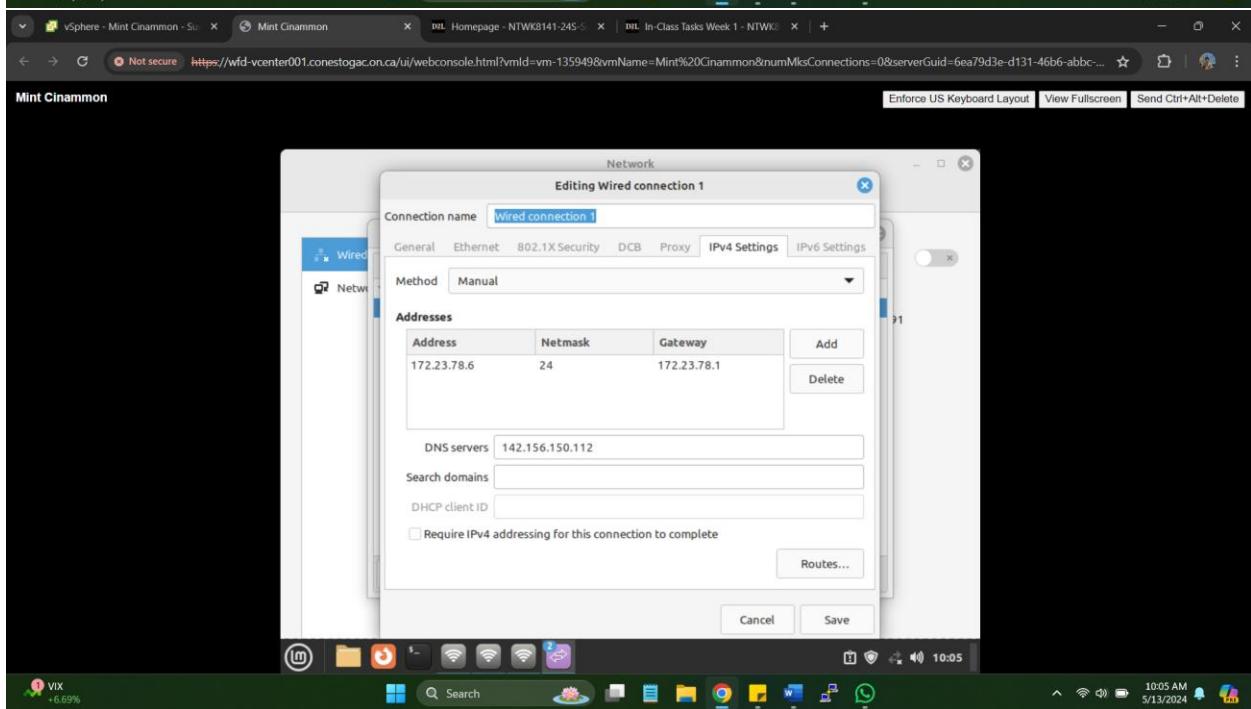
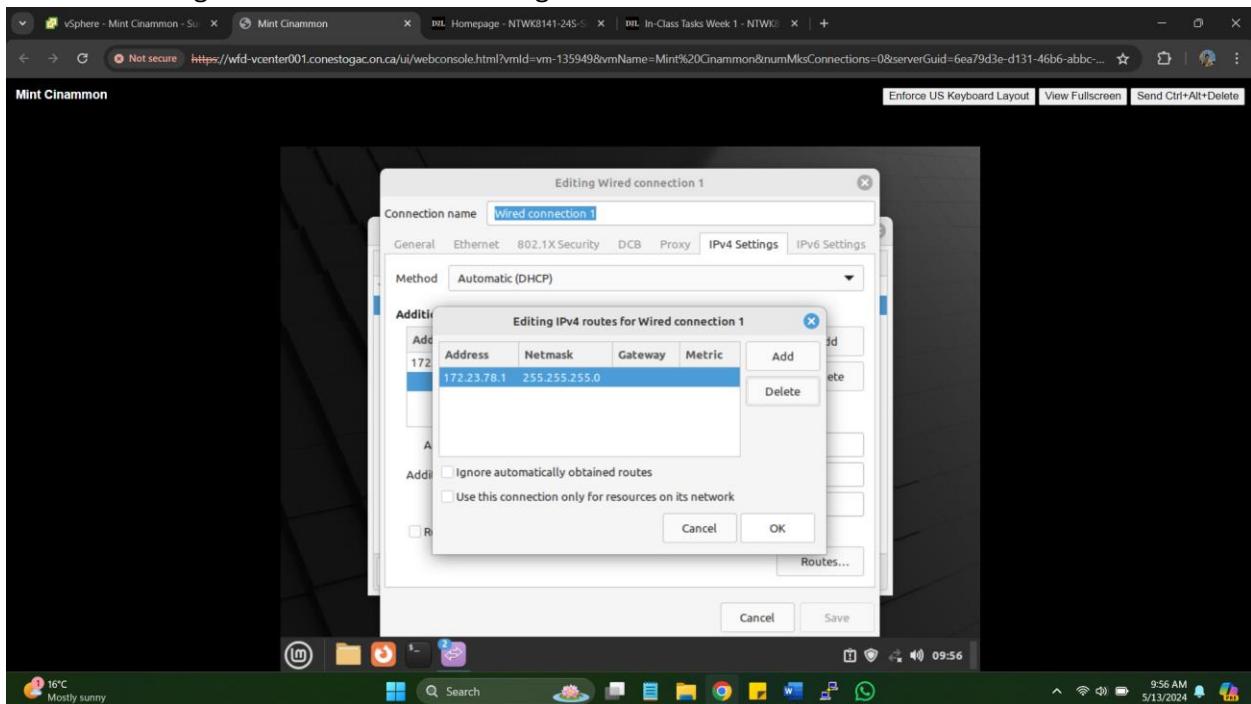


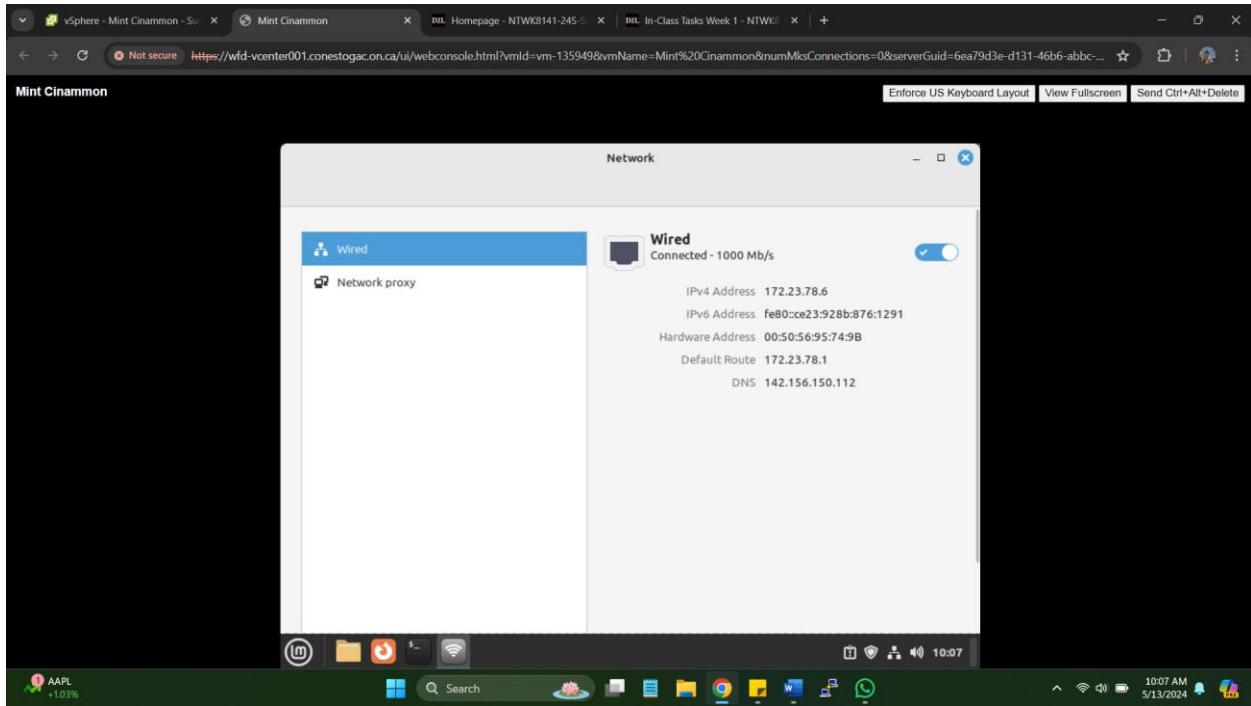
Login with username and password



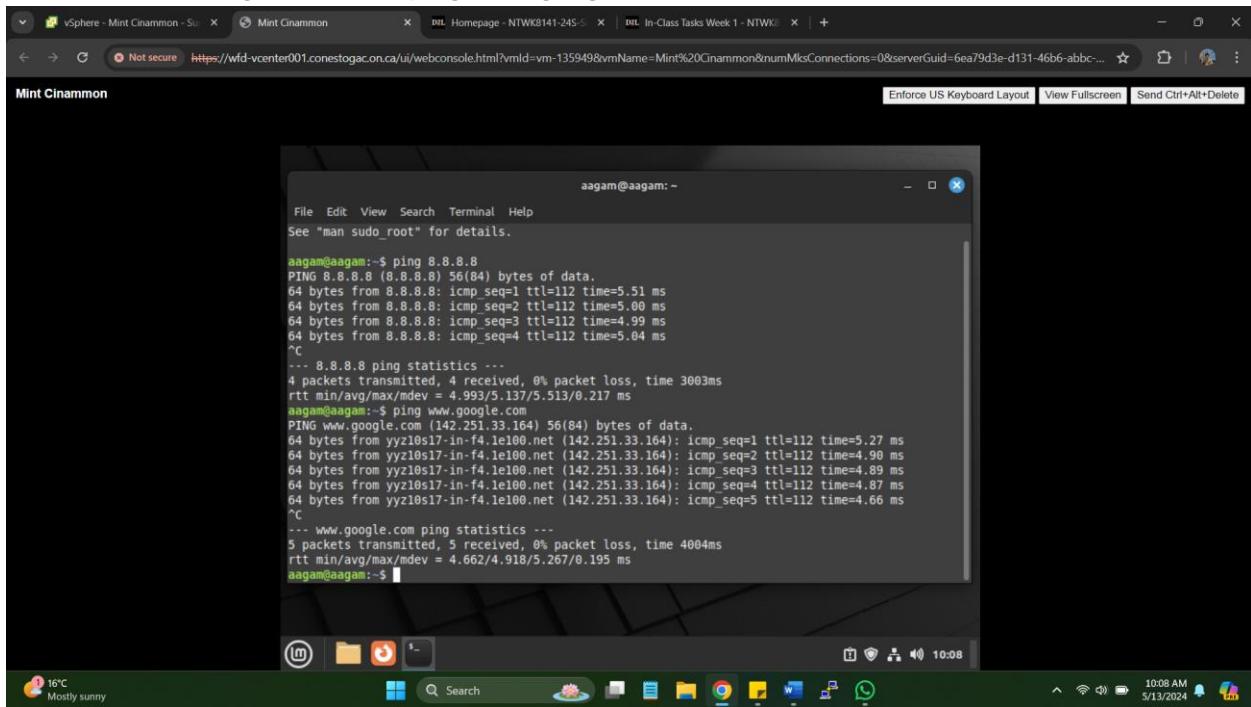


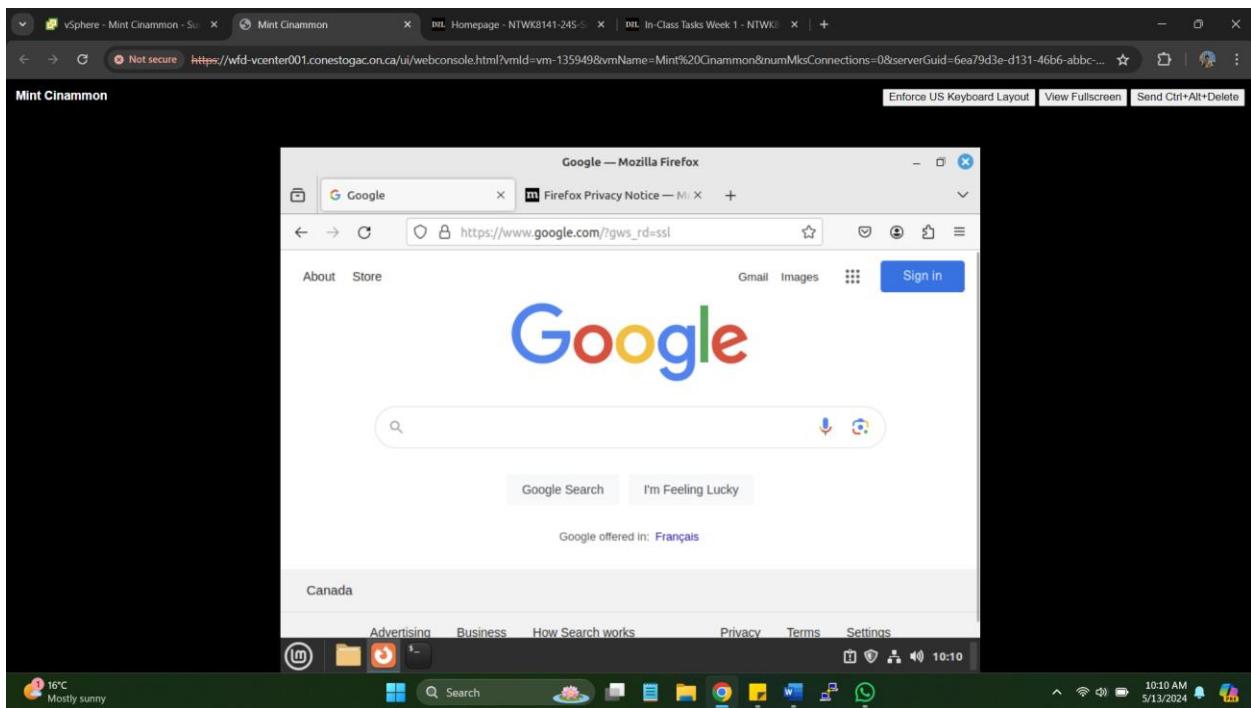
## Network Setting IP: 172.23.78.6 and setting route



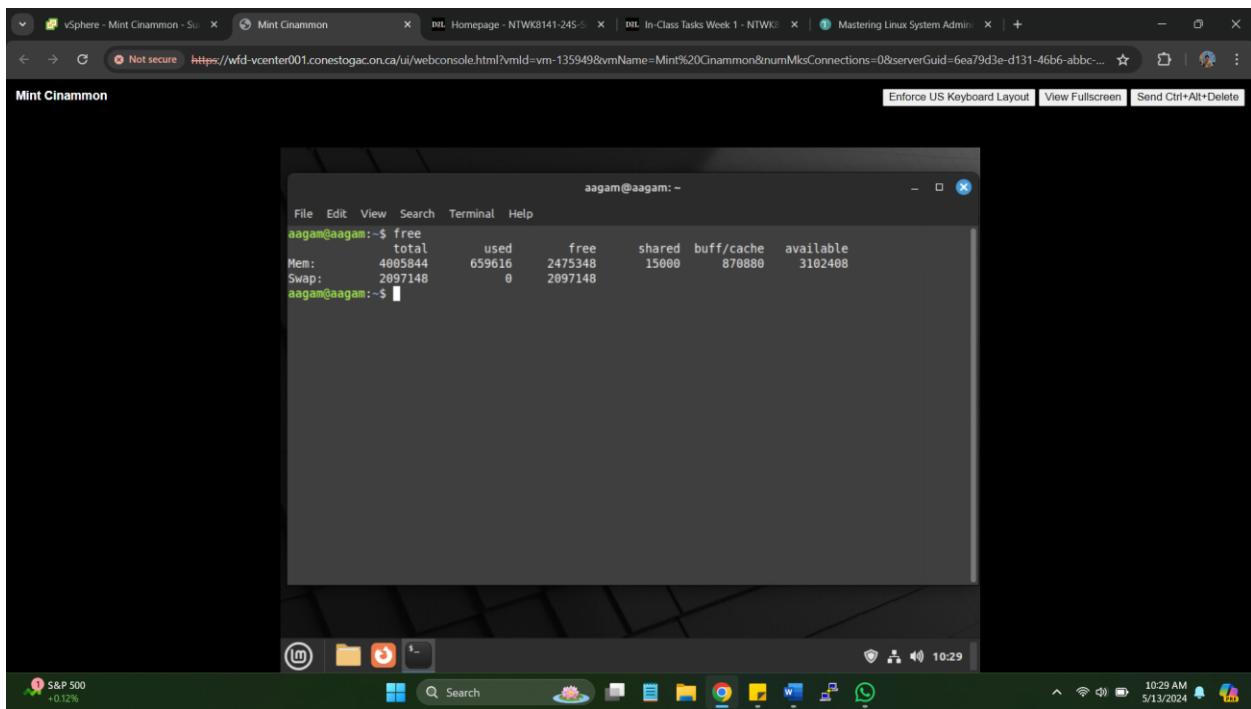


From Terminal, Ping 8.8.8.8 and ping www.google.com





Command: free



Command: cat /proc/meminfo

```
aagam@aagam:~$ cat /proc/meminfo
MemTotal:        4005844 kB
MemFree:         2466568 kB
MemAvailable:   3094988 kB
Buffers:          45576 kB
Cached:          778284 kB
SwapCached:       0 kB
Active:          546848 kB
Inactive:        784724 kB
Active(anon):    1298 kB
Inactive(anon):  521748 kB
Active(file):   545640 kB
Inactive(file): 262976 kB
Unevictable:      32 kB
Mlocked:          32 kB
SwapTotal:       2097148 kB
SwapFree:        2097148 kB
Dirty:             8 kB
Writeback:        0 kB
AnonPages:       507748 kB
Mapped:          253056 kB
Shmem:            15244 kB
KReclaimable:    48792 kB
Slab:             100832 kB
SReclaimable:    48792 kB
SUnreclaim:     52040 kB
KernelStack:     6512 kB
PageTables:      11676 kB
PageTables:        0 kB
NFS_Unstable:     0 kB
```

```
aagam@aagam:~$ cat /proc/meminfo
SReclaimable:    48792 kB
SUnreclaim:     52040 kB
KernelStack:     6512 kB
PageTables:      11676 kB
NFS_Unstable:     0 kB
Bounce:           0 kB
WritebackTmp:     0 kB
CommitLimit:    4100068 kB
Committed_AS:  2809288 kB
VmallocTotal:  34359738367 kB
VmallocUsed:   33266 kB
VmallocChunk:    0 kB
Percpu:          1408 kB
HardwareCorrupted: 0 kB
AnonHugePages:    0 kB
ShmemHugePages:   0 kB
ShmemPmdMapped:   0 kB
FileHugePages:    0 kB
FilePmdMapped:    0 kB
HugePages_Total:  0
HugePages_Free:   0
HugePages_Rsvd:   0
HugePages_Surp:   0
Hugepagesize:    2048 kB
Hugetlb:          0 kB
DirectMap4k:     214912 kB
DirectMap2M:    3979264 kB
DirectMap1G:   2097152 kB
aagam@aagam:~$
```

## Command: ps ax

The image shows a Linux desktop environment with two terminal windows. Both terminals are running the command `ps ax`, which lists all processes on the system. The desktop interface includes a top bar with application icons and a bottom dock with various application icons.

**Terminal Window 1 (Top):**

```
aagam@aagam:~$ ps ax
PID TTY STAT TIME COMMAND
 1 ? Ss 0:00 /sbin/init splash
 2 ? S 0:00 [kthread]
 3 ? I< 0:00 [rcu_gp]
 4 ? I< 0:00 [rcu_par_gp]
 5 ? I< 0:00 [slub flushwq]
 6 ? I< 0:00 [netns]
 7 ? I 0:00 [kworker/0:0-events]
 8 ? I< 0:00 [kworker/0:0-events_highpri]
 9 ? I 0:00 [kworker/u4:0-flush-8:0]
10 ? I< 0:00 [percpu_wq]
11 ? S 0:00 [rcu_tasks_rude]
12 ? S 0:00 [rcu_tasks_trace]
13 ? S 0:00 [ksoftirqd/0]
14 ? I 0:00 [rcu_sched]
15 ? S 0:00 [migration/0]
16 ? S 0:00 [idle_inject/0]
18 ? S 0:00 [cpuhp/0]
19 ? S 0:00 [cpuhp/1]
20 ? S 0:00 [idle_inject/1]
21 ? S 0:00 [migration/1]
22 ? S 0:00 [ksoftirqd/1]
24 ? I< 0:00 [kworker/1:0-events_highpri]
25 ? S 0:00 [kdevtmpfs]
26 ? I< 0:00 [inet_frag_wq]
27 ? S 0:00 [kaudittd]
28 ? S 0:00 [khungtaskd]
29 ? S 0:00 [oom_reaper]
```

**Terminal Window 2 (Bottom):**

```
aagam@aagam:~$ ps ax
1379 ? Ssl 0:00 /usr/libexec/gvfs-goa-volume-monitor
1383 ? Sl 0:00 /usr/libexec/goa-daemon
1386 ? Sl 0:28 cinnamon --replace
1397 ? Sl 0:00 /usr/libexec/goa-identity-service
1403 ? Ssl 0:00 /usr/libexec/gvfs-afc-volume-monitor
1425 ? Sl 0:00 /usr/lib/x86_64-linux-gnu/xapps/xapp-sn-watcher
1441 ? Sl 0:00 /usr/libexec/evolution-data-server/evolution-alarm-notify
1442 ? Sl 0:00 /usr/lib/policykit-1-gnome/polkit-gnome-authentication-agent-1
1446 ? Sl 0:00 nemo-desktop
1448 ? Sl 0:00 /usr/bin/python3 /usr/bin/blueman-applet
1453 ? Sl 0:00 nm-applet
1458 ? Sl 0:00 /usr/libexec/geoclue-2.0/demos/agent
1462 ? Sl 0:00 cinnamon-killer-daemon
1493 ? Ssl 0:00 /usr/libexec/evolution-source-registry
1514 ? Ssl 0:00 /usr/libexec/evolution-calendar-factory
1538 ? Ssl 0:00 /usr/libexec/evolution-addressbook-factory
1576 ? Ss 0:00 /usr/lib/bluetooth/obexd
1592 ? Sl 0:00 /usr/libexec/gvfsd-trash --spawner :1.3 /org/gtk/gvfs/exec_spaw/0
1605 ? Ssl 0:00 /usr/libexec/gvfsd-metadata
1633 ? Sl 0:00 mintUpdate
1689 ? S 0:00 /usr/bin/python3 /usr/share/system-config-printer/applet.py
1693 ? Sl 0:01 mintReport-tray
2169 ? Ssl 0:00 /usr/libexec/packagekitd
2217 ? Ssl 0:00 /usr/libexec/gnome-terminal-server
2238 pts/0 Ss 0:00 bash
2247 ? I 0:00 [kworker/u4:3-events_power_efficient]
2249 ? I 0:00 [kworker/1:0]
2257 pts/0 R+ 0:00 ps ax
```