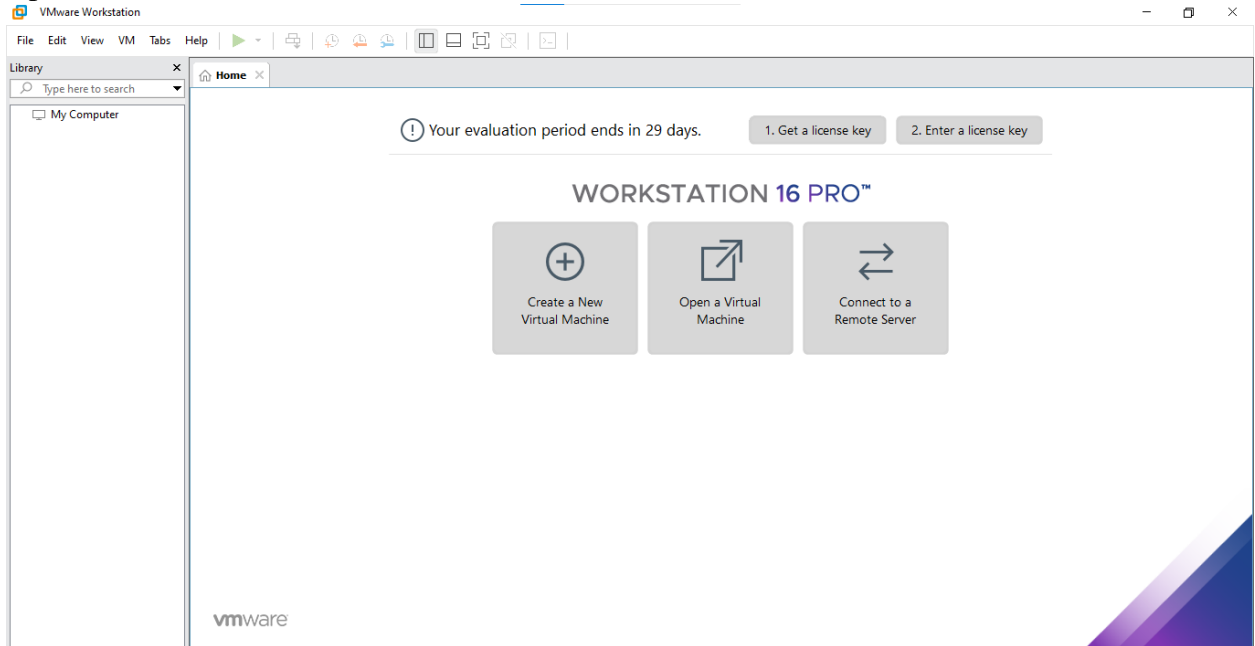


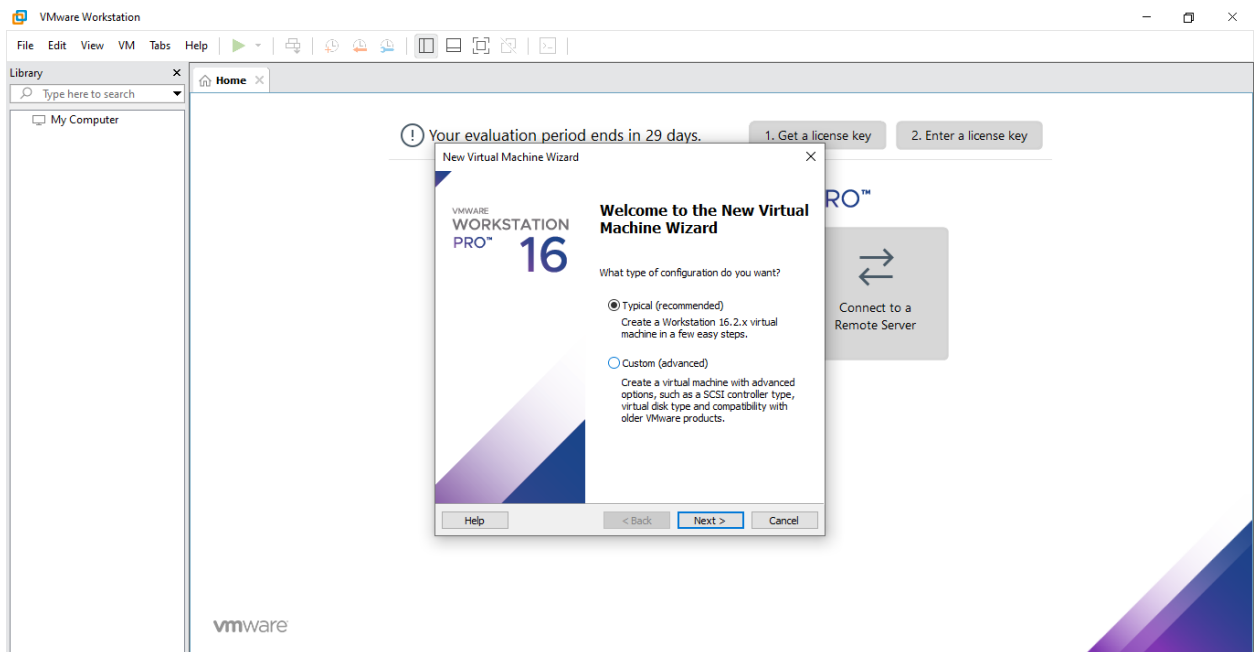
Practical 1

Steps:

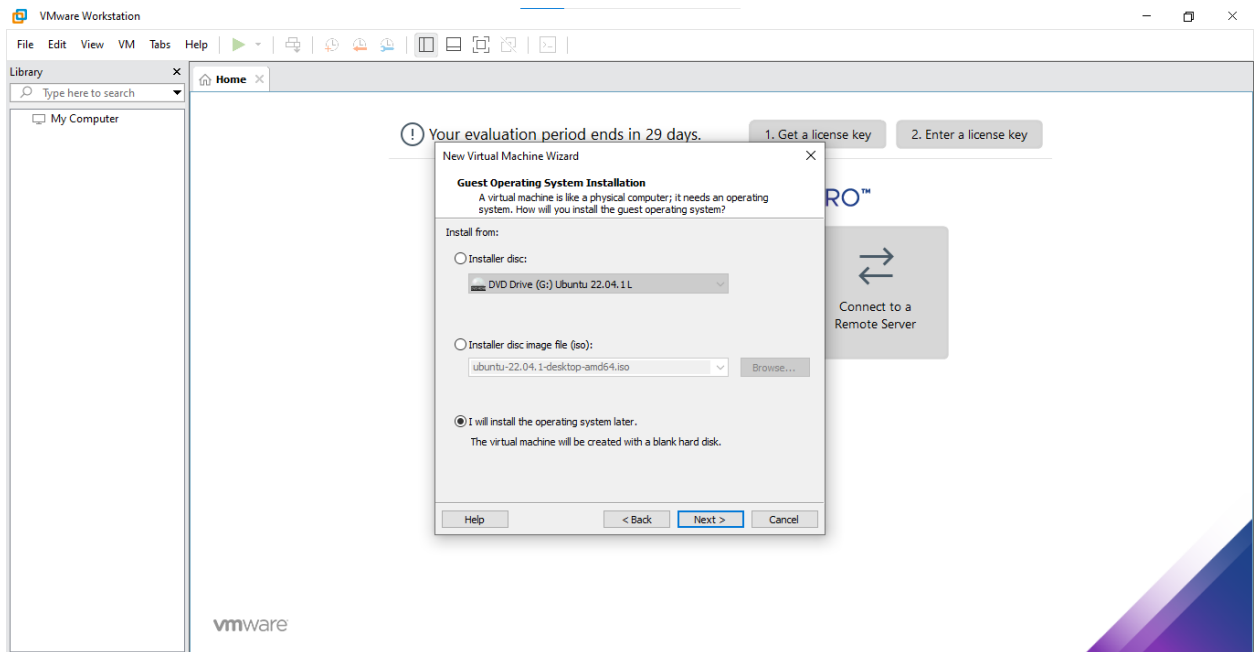
1. Open VM Ware Workstation.



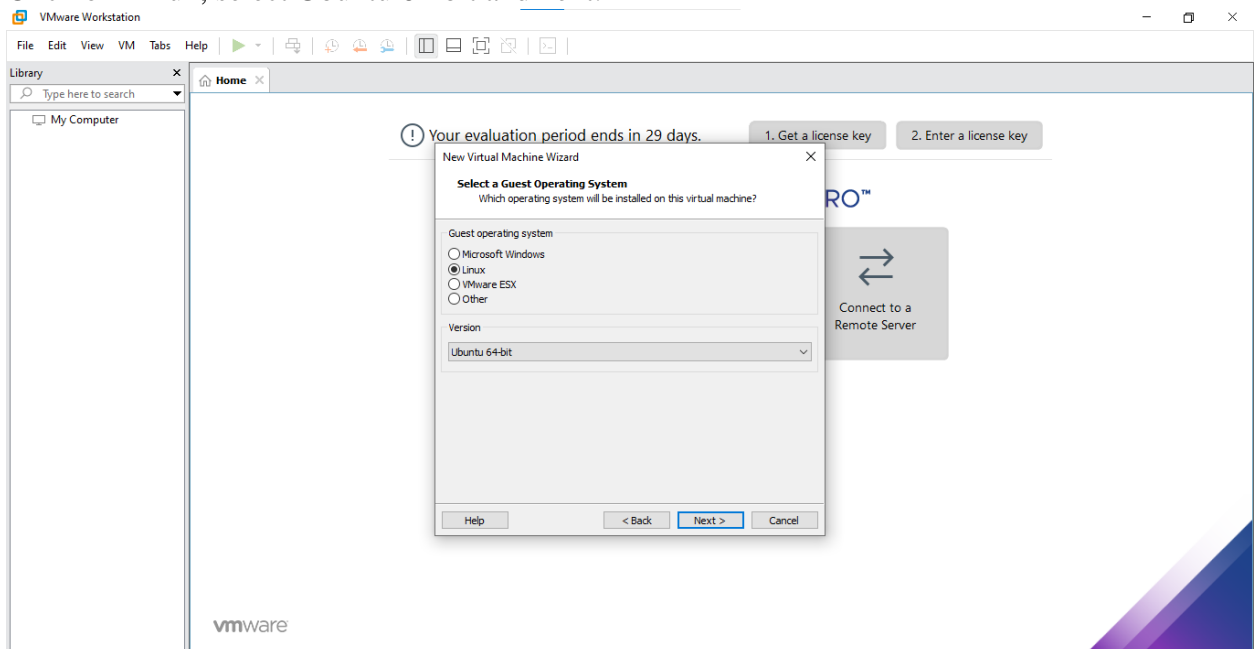
2. Create a new virtual machine and click next.



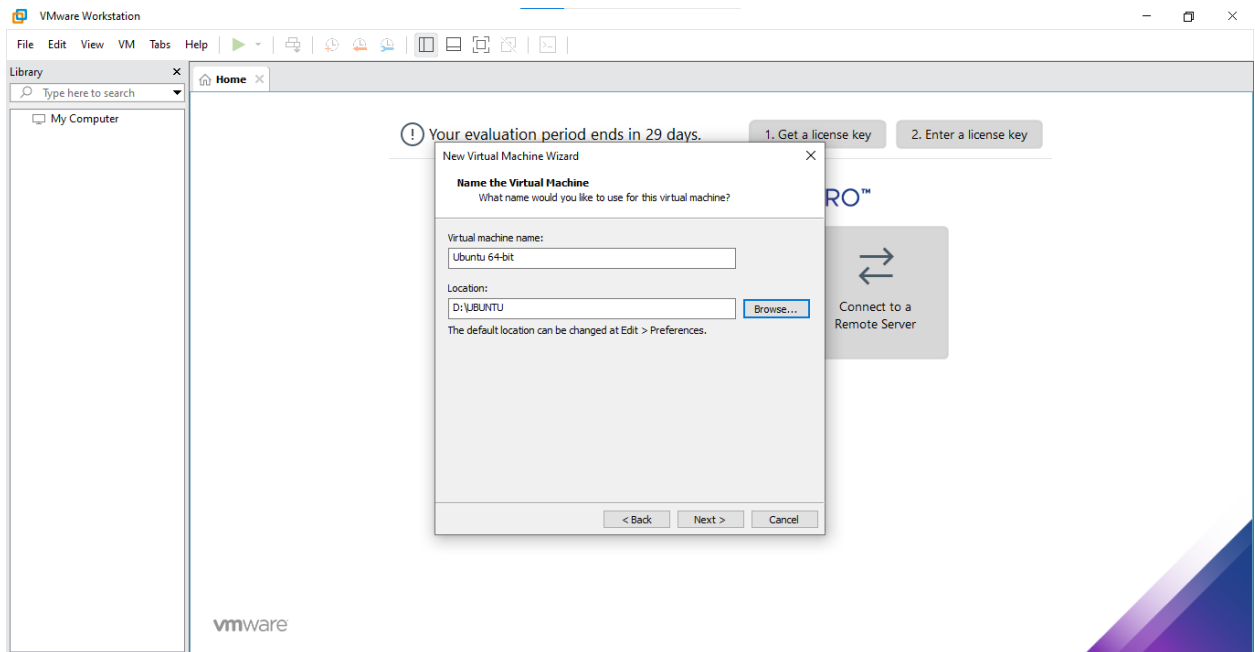
3. Click 3rd Option and next.



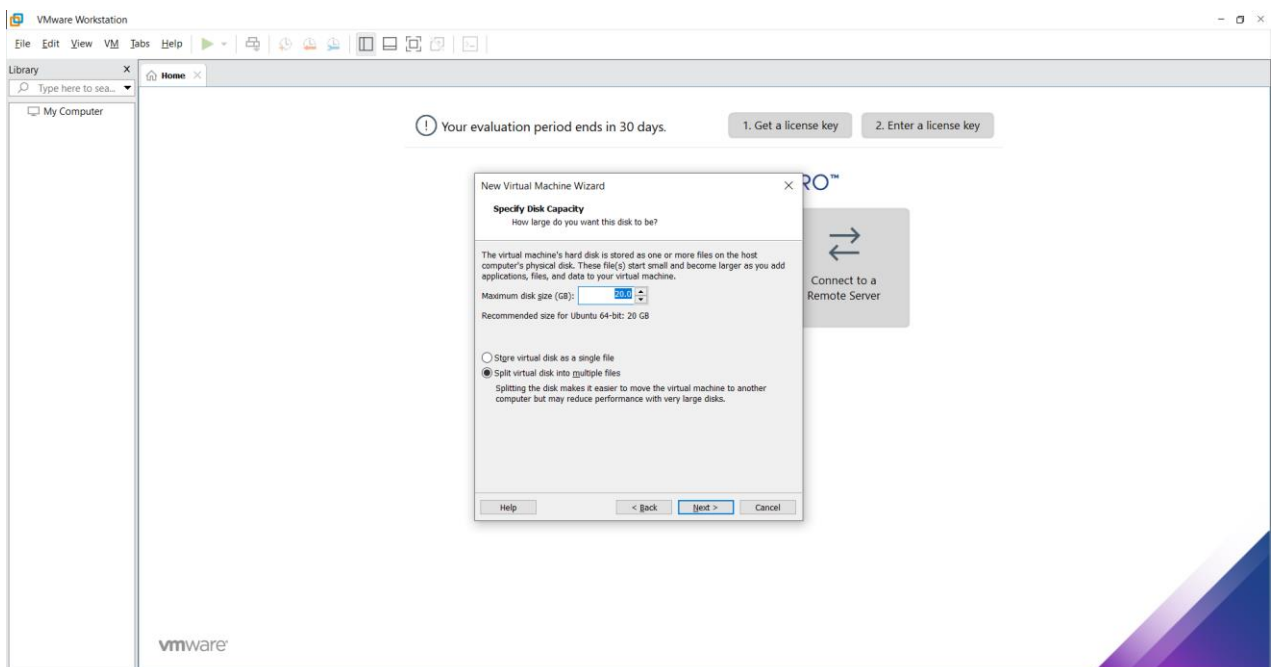
4. Click on Linux, select Ubuntu 64-bit and next.



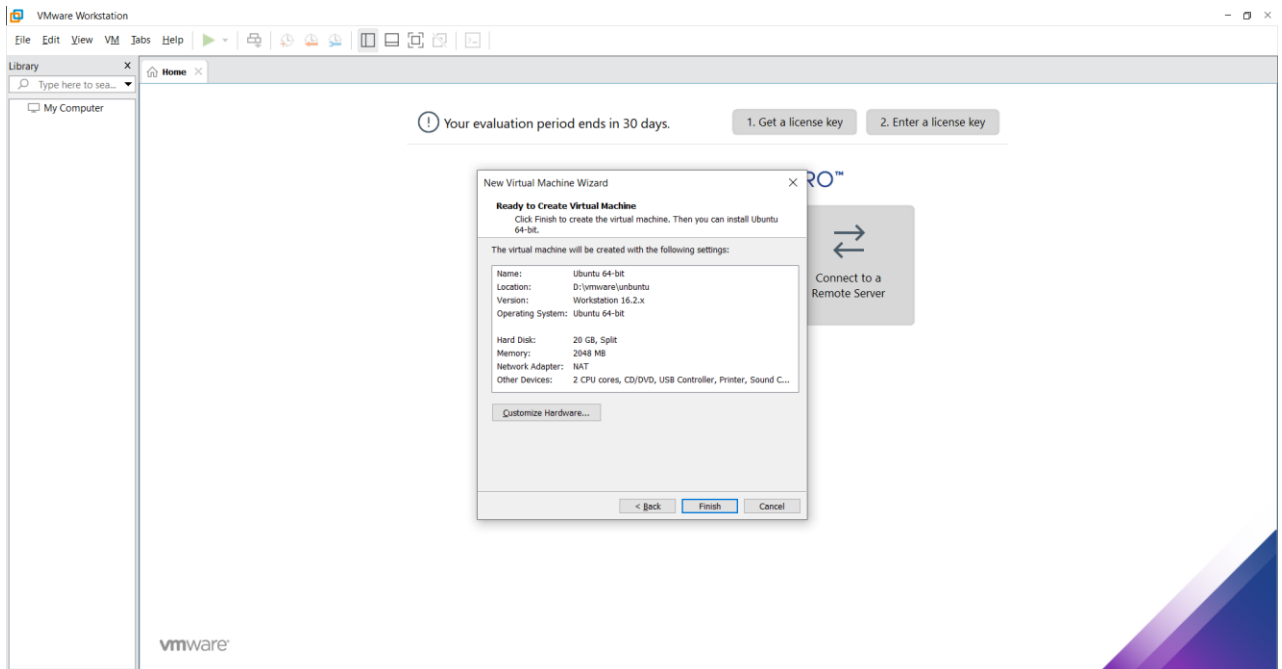
5. Name your virtual machine and create a new folder for it and next.



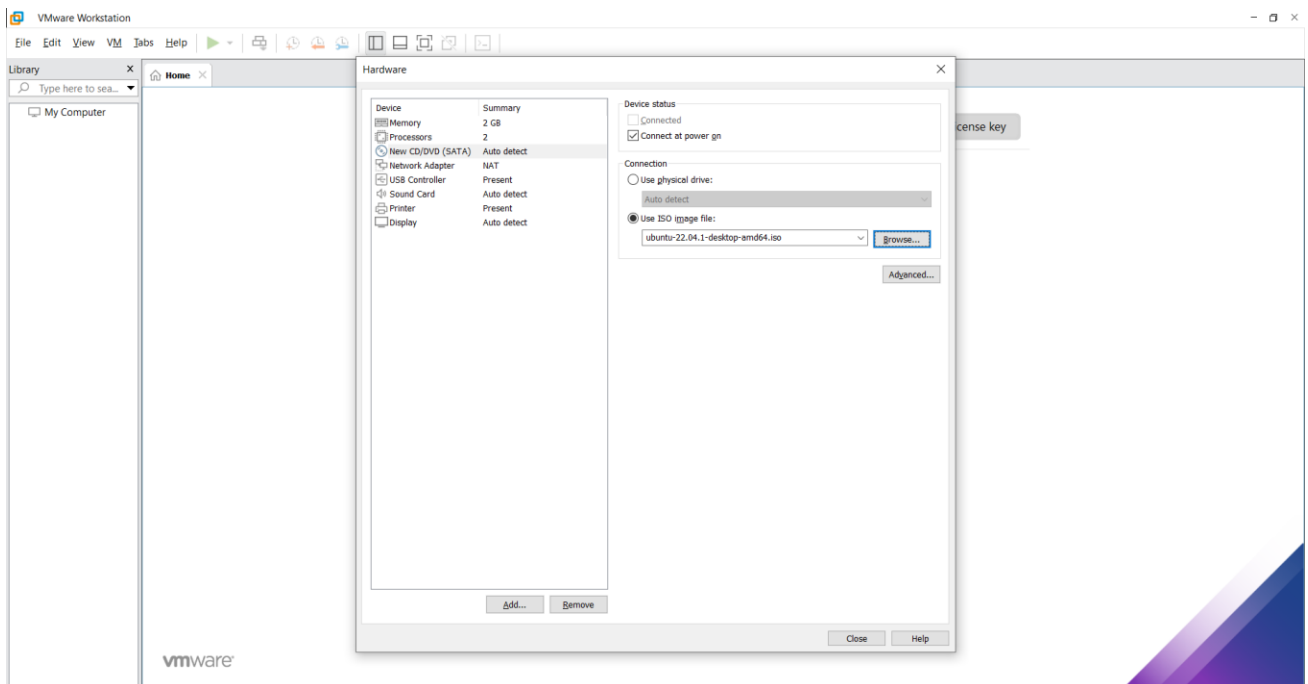
6. Disk Size 20GB and select split option



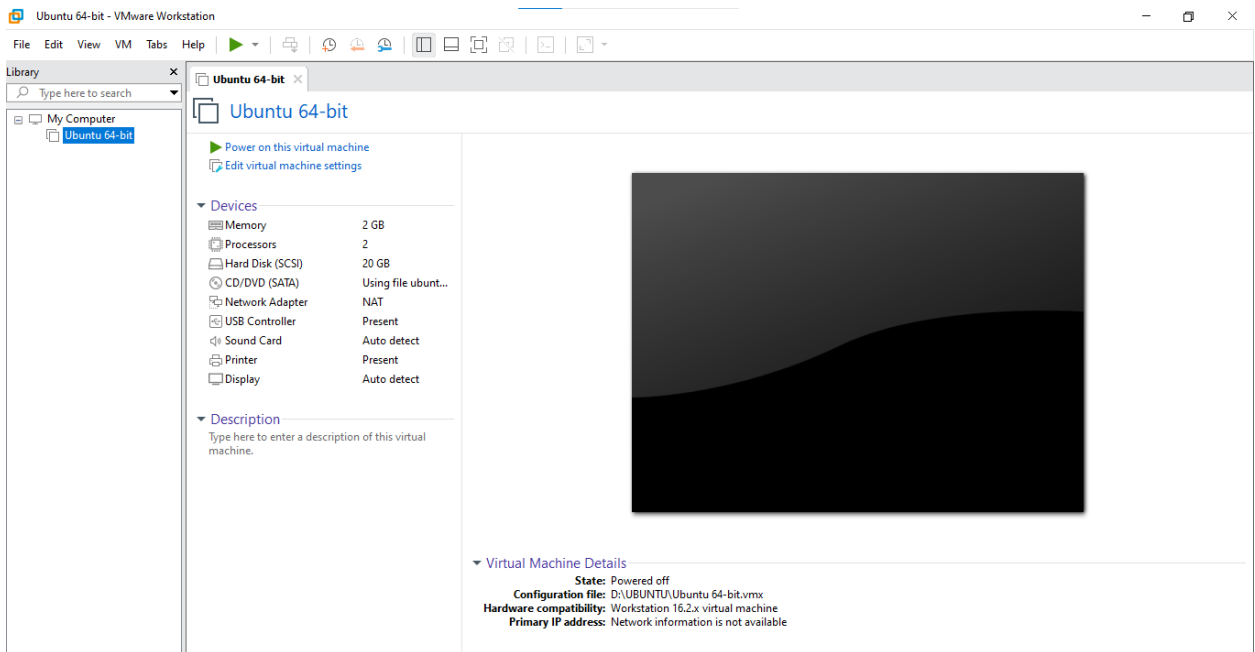
7. Click on customize.



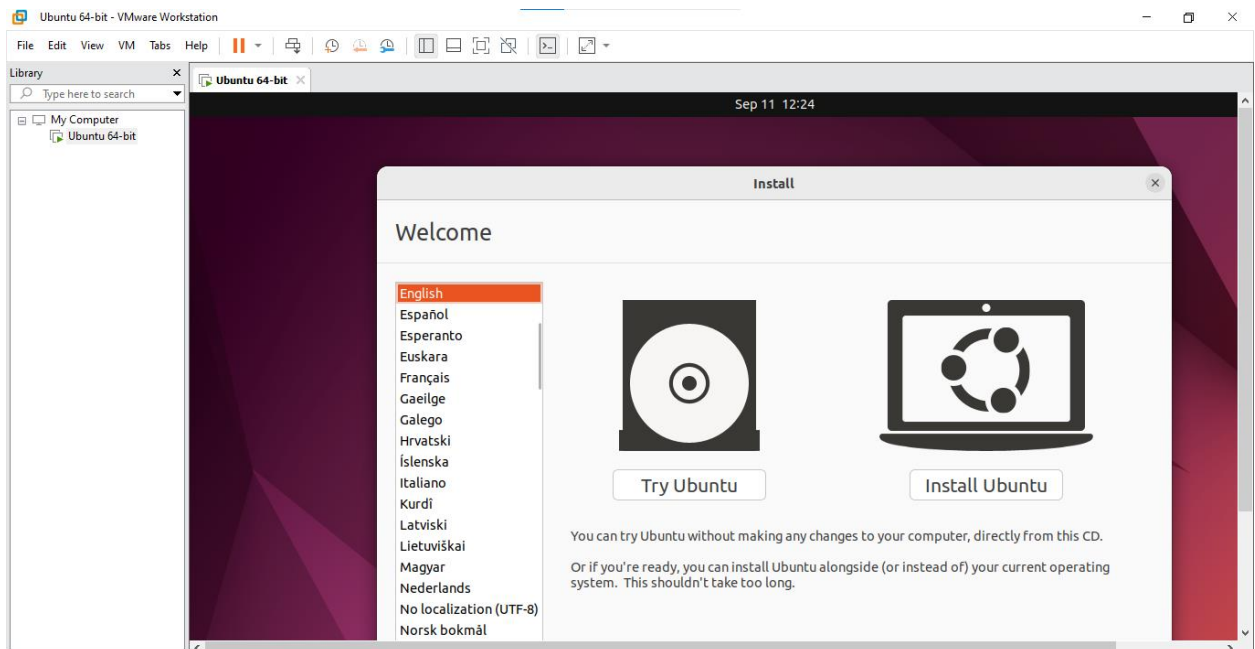
8. Click on New CD/DVD and click on Use ISO image file and select 22LTS Ubuntu iso file and close.



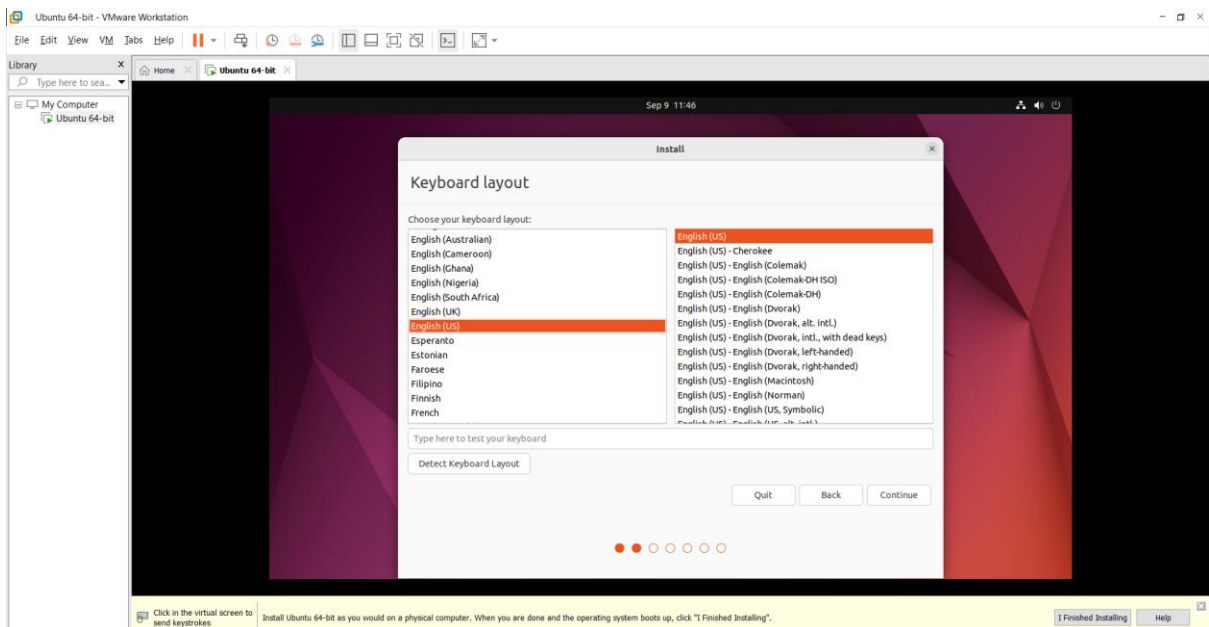
9. After Customization click on finish and this screen will appear click on Power on this vm.



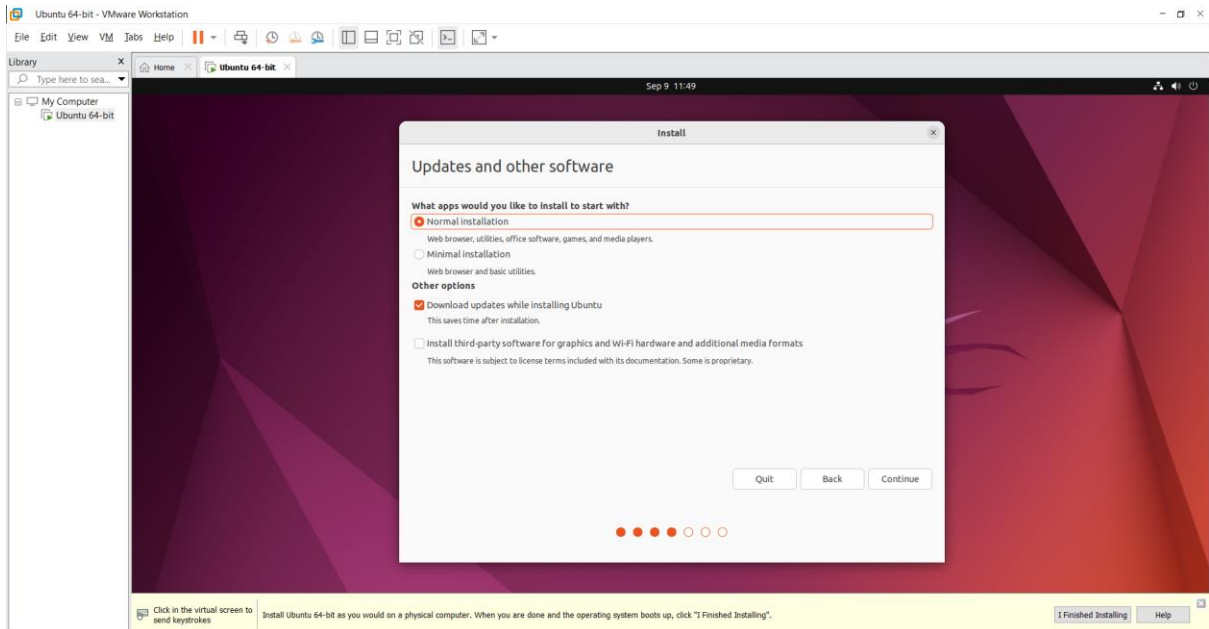
10. Install Ubuntu.



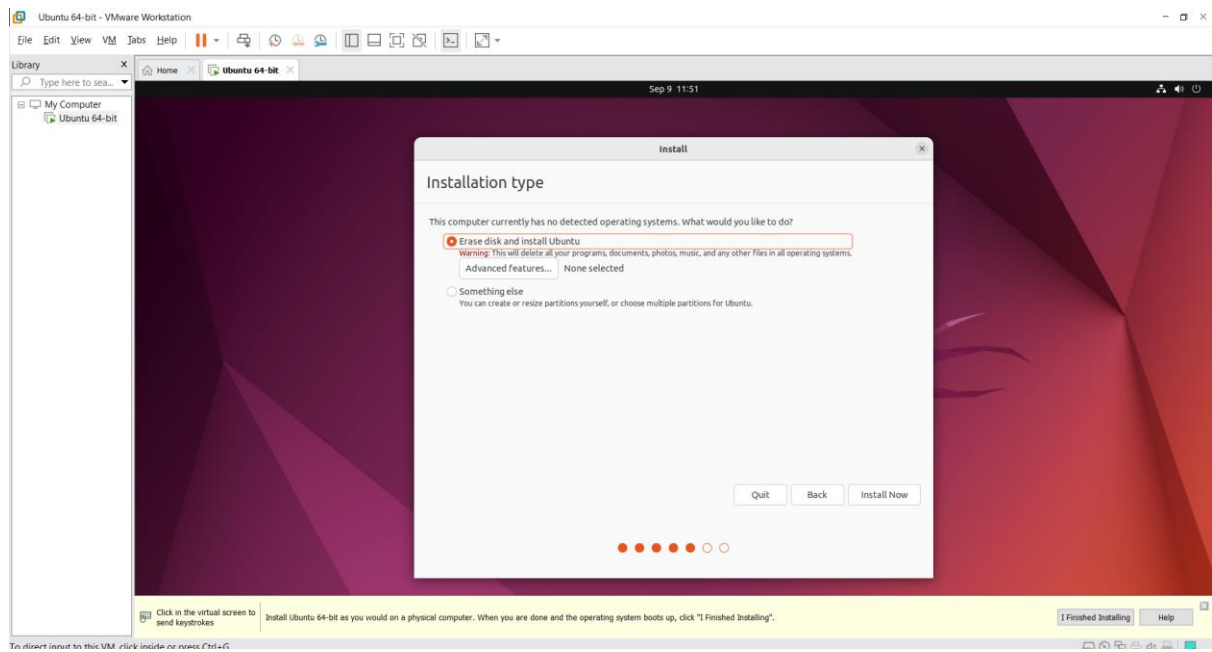
11. Select Language.



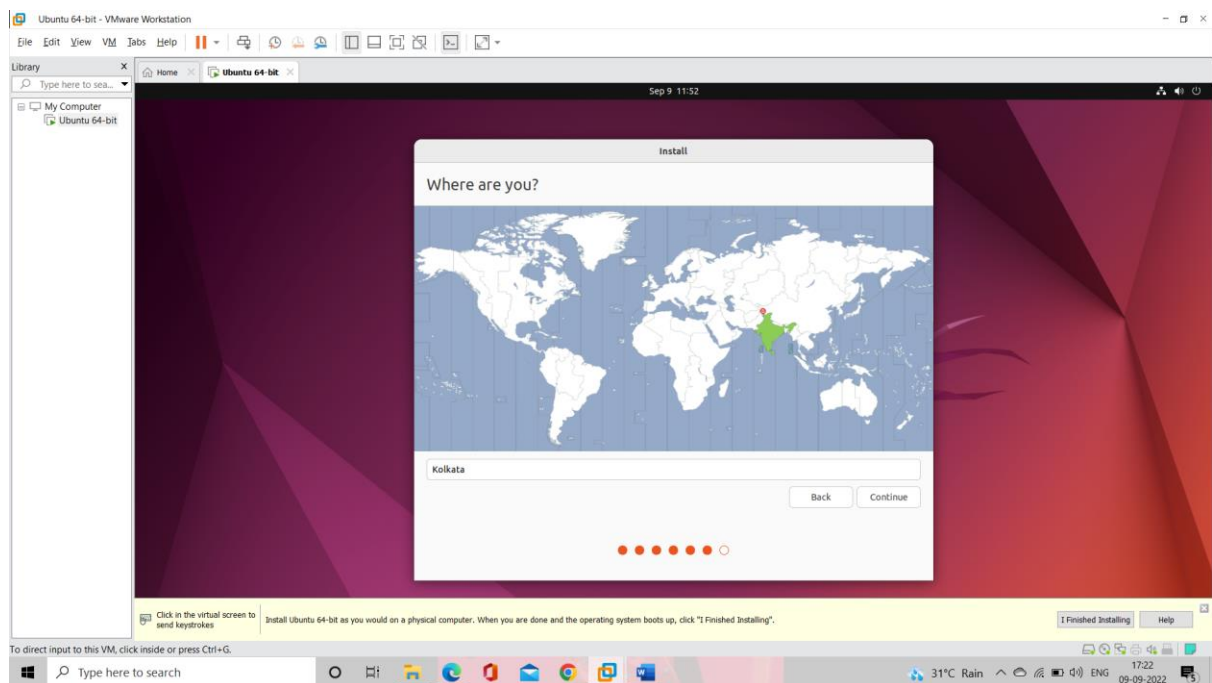
12. Click Normal Installation and Download Updates.



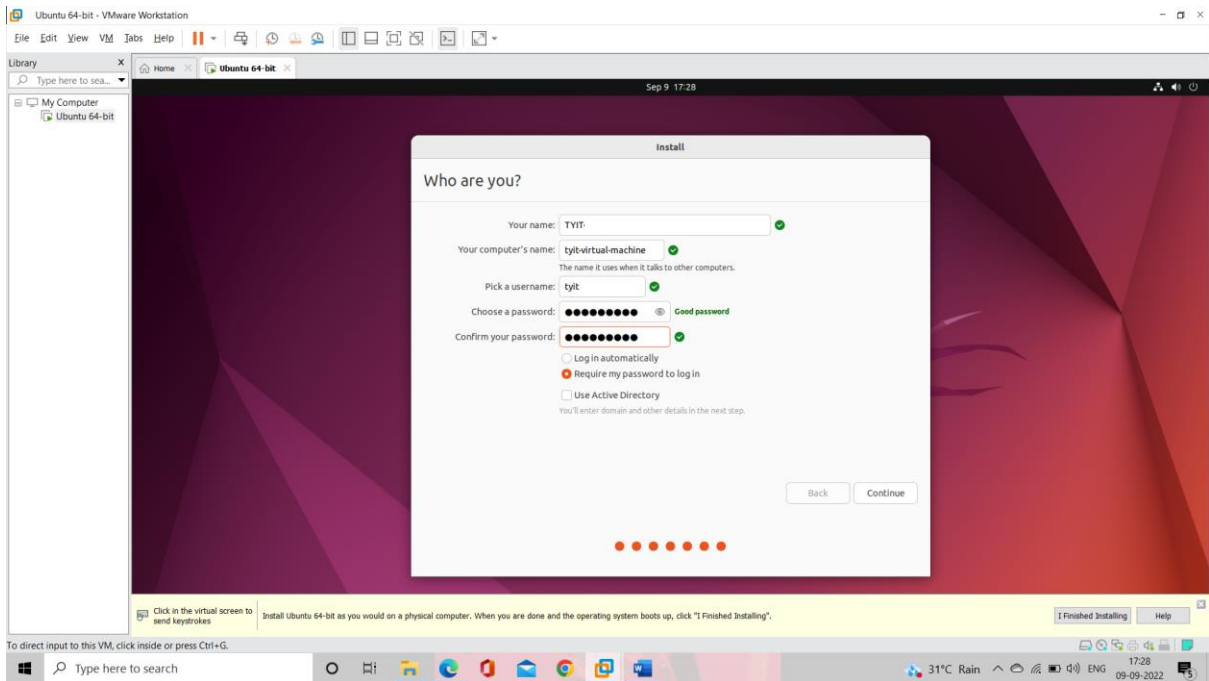
13. Erase Disk.



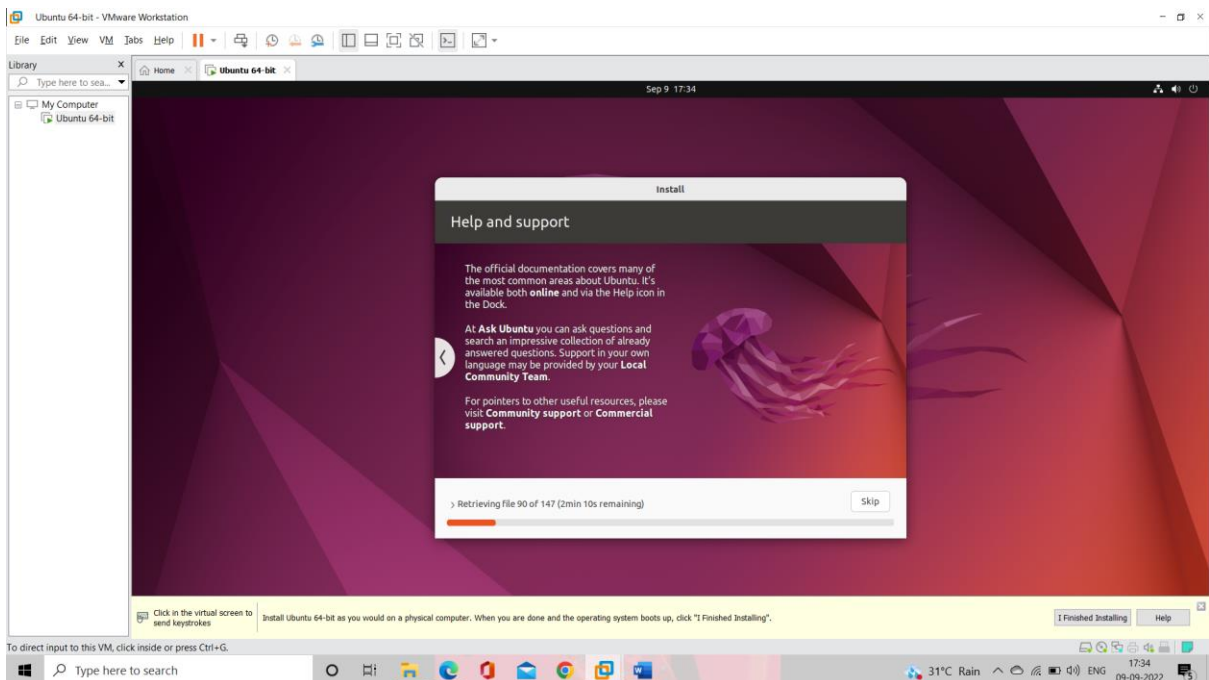
14. Select Timezone.



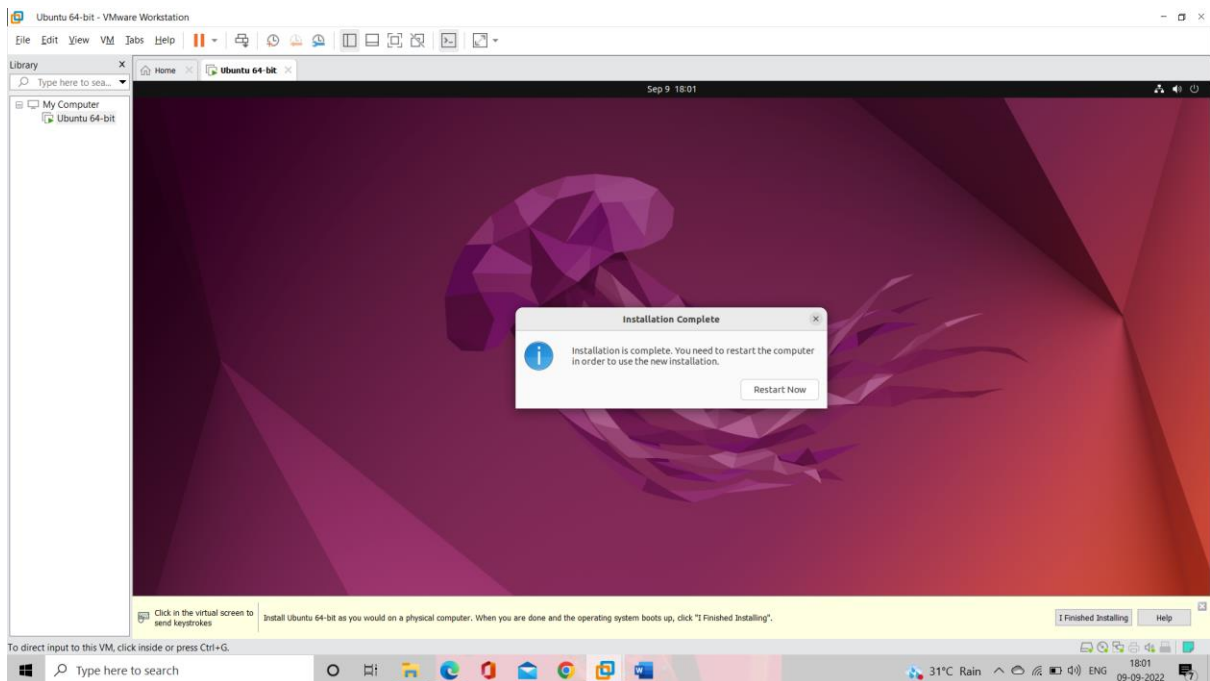
15. Set the details.



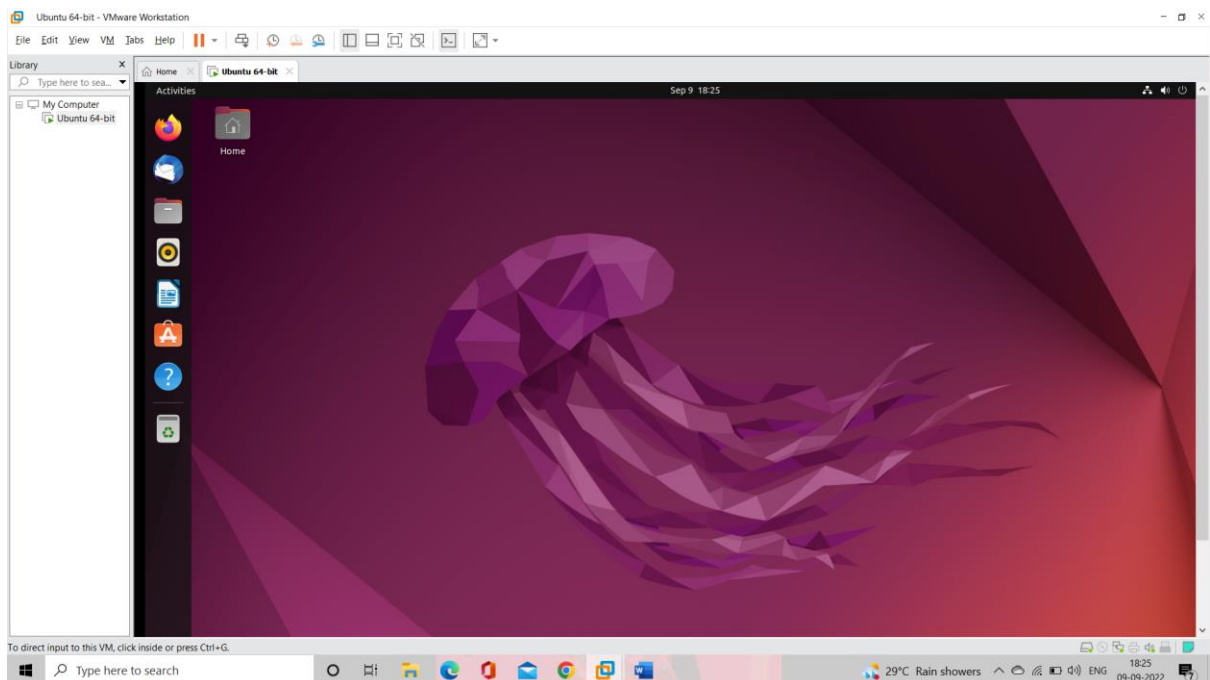
16. Wait for it to install.



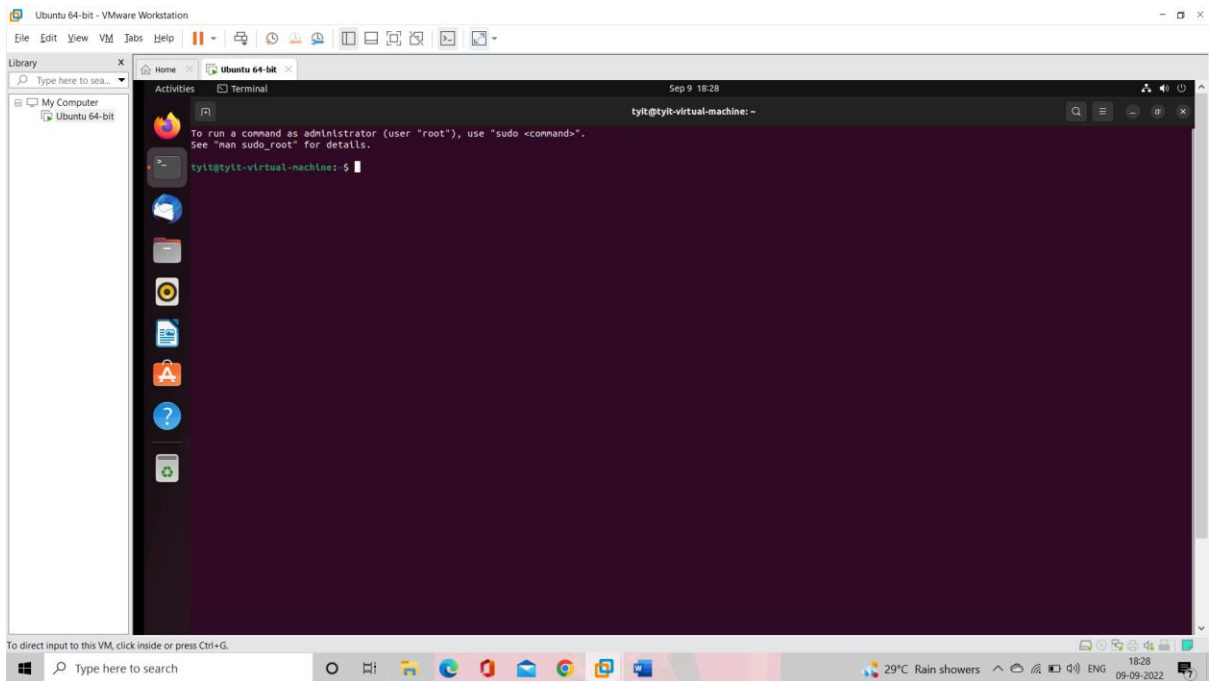
17. Restart.



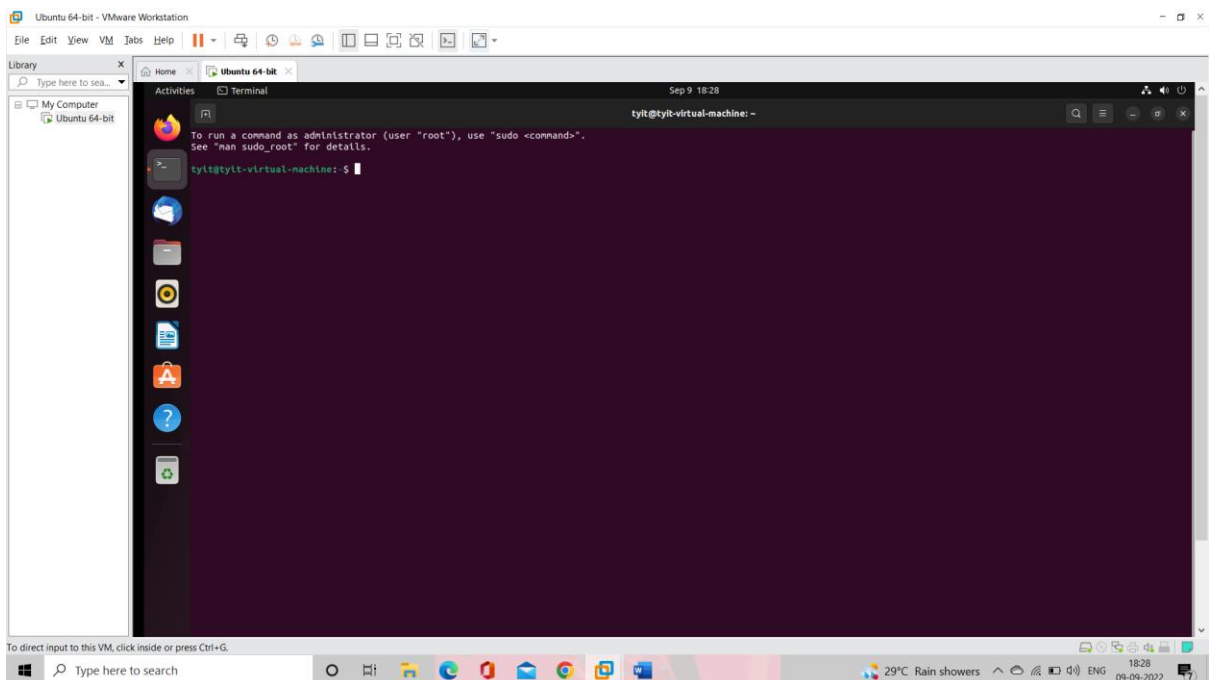
18. Your screen will appear like this.



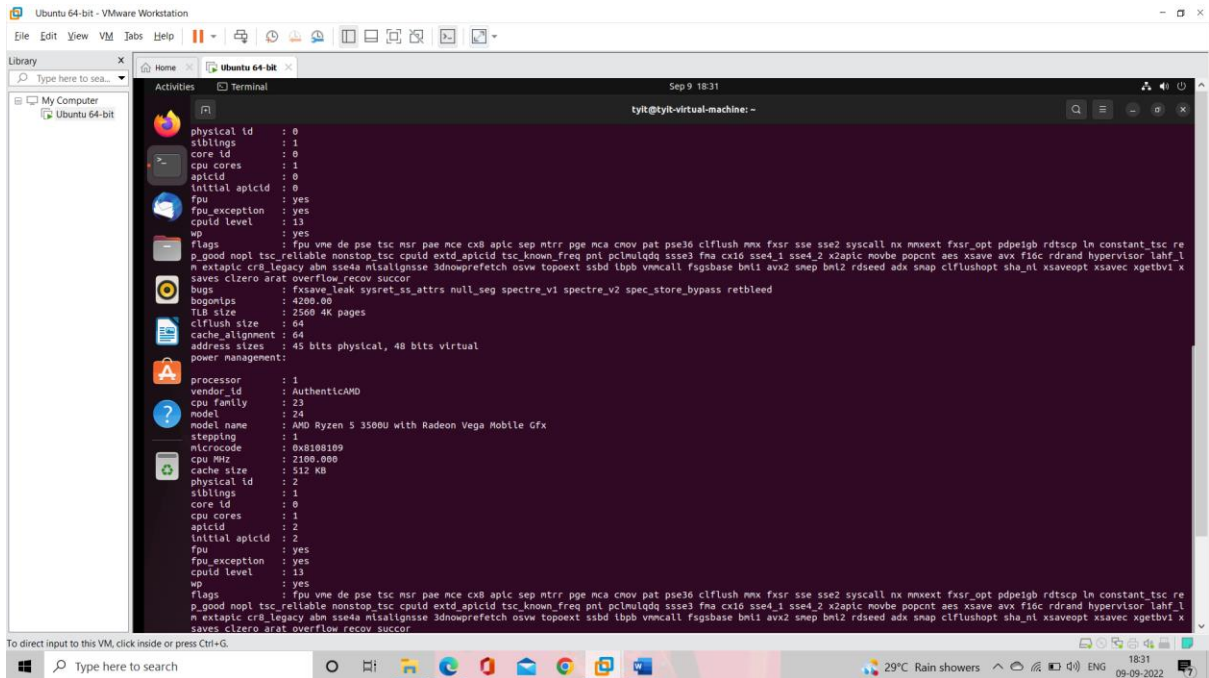
19. Open Terminal.



20. sudo apt update



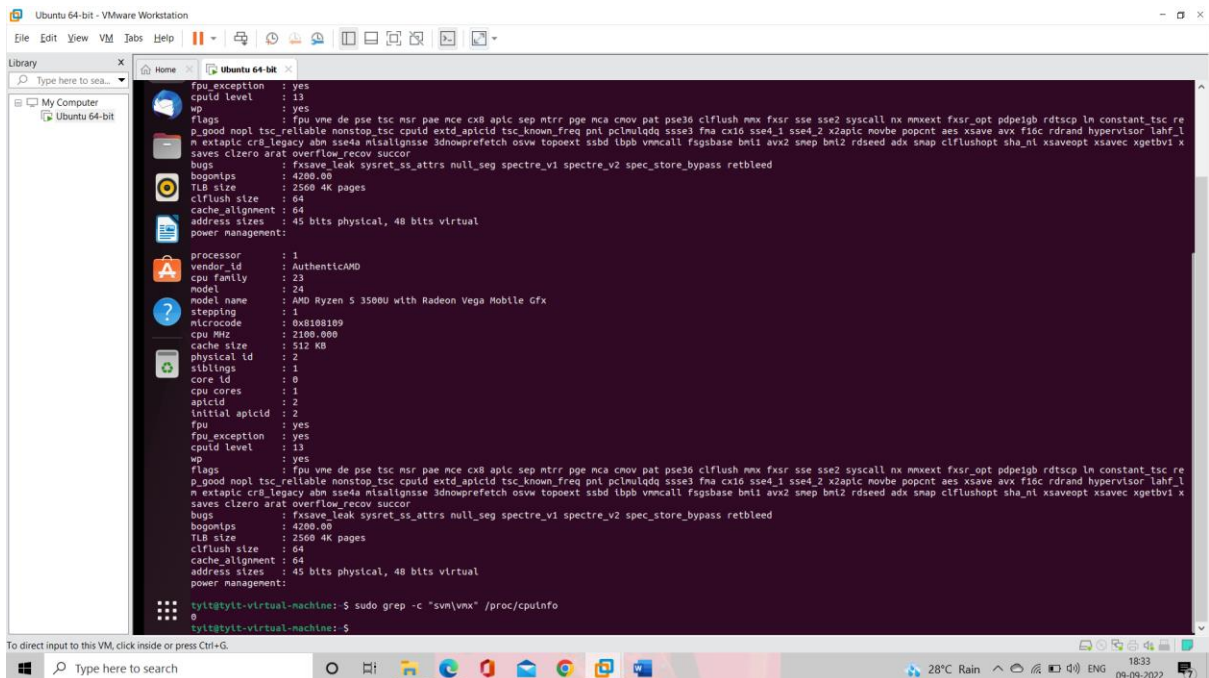
21. Cat /proc/cpuinfo



```
physical id      : 0
siblings        : 1
core id         : 0
cpu cores       : 1
apicid          : 0
initial apicid  : 0
fpu             : yes
fpu_exception   : yes
cpuid level     : 13
wp              : yes
flags           : fpu vme de pse tsc mtr pae mce cx8 apic sep ntrr pge mca cmov pat pse3d clflush mmx fxsr sse sse2 syscall nx mwait fpu_opt pde1gb rdtscp lm constant_tsc re
p_good nopl tsc_reliable nonstop_tsc cpuid extd_apicid tsc_known_freq pni pclmulqdq ssse3 fma cx16 sse4_1 sse4_2 x2apic movbe popcnt aes xsave avx f16c rdrand hypervisor lahf_l
m extapic cr8_legacy abm sse4a misalignsse 3dnowprefetch osvw topoext ssbd tlbpb vmcall fsgsbase bnl1 avx2 snep bml2 rdseed adx snap clflushopt sha_ni xsaveopt xsavec xgetbv1 x
saves clzero arat overflow_recov succor
bugs            : fsave_leak sysret_ss_attrs null_seg spectre_v1 spectre_v2 spec_store_bypass retbleed
bogomips        : 4200.00
TLB size        : 2560 4K pages
clflush size    : 64
cache_alignment : 64
address sizes   : 45 bits physical, 48 bits virtual
power management:

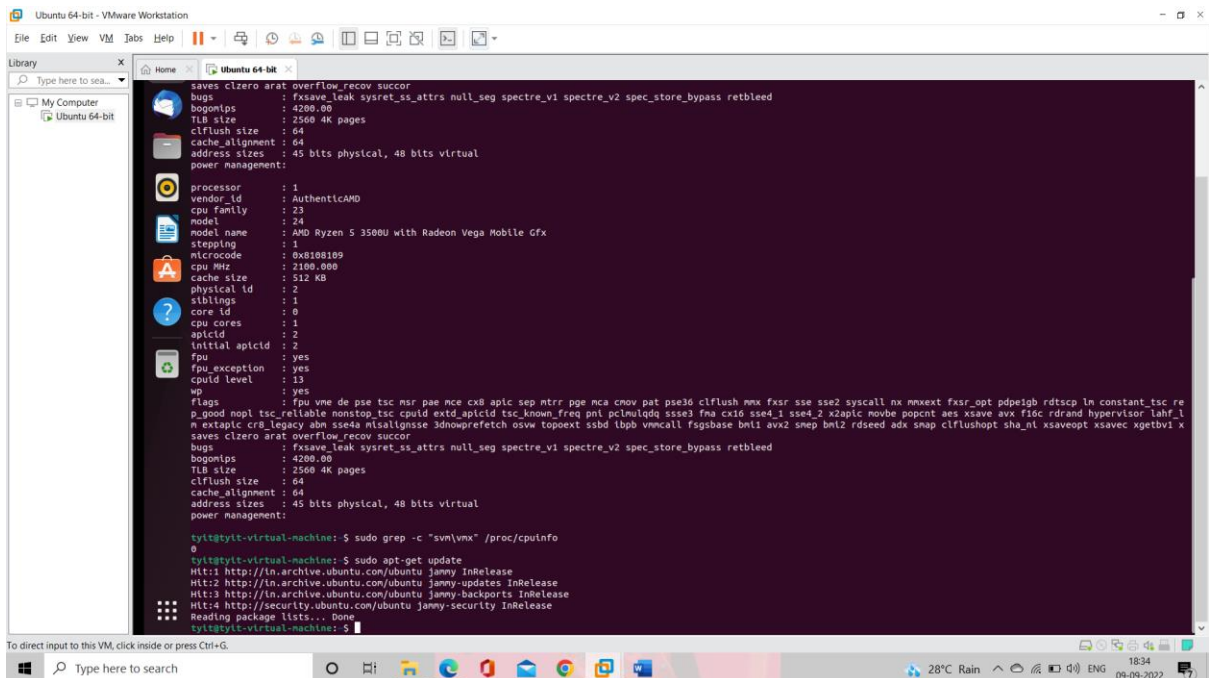
processor        : 1
vendor_id       : AuthenticAMD
cpu family      : 23
model           : 24
model name      : AMD Ryzen 5 3500U with Radeon Vega Mobile Gfx
stepping        : 1
microcode       : 0x8108109
cpu MHz         : 2100.000
cache size      : 512 KB
physical id     : 2
siblings        : 1
core id         : 0
cpu cores       : 1
apicid          : 2
initial apicid  : 2
fpu             : yes
fpu_exception   : yes
cpuid level     : 13
wp              : yes
flags           : fpu vme de pse tsc mtr pae mce cx8 apic sep ntrr pge mca cmov pat pse3d clflush mmx fxsr sse sse2 syscall nx mwait fpu_opt pde1gb rdtscp lm constant_tsc re
p_good nopl tsc_reliable nonstop_tsc cpuid extd_apicid tsc_known_freq pni pclmulqdq ssse3 fma cx16 sse4_1 sse4_2 x2apic movbe popcnt aes xsave avx f16c rdrand hypervisor lahf_l
m extapic cr8_legacy abm sse4a misalignsse 3dnowprefetch osvw topoext ssbd tlbpb vmcall fsgsbase bnl1 avx2 snep bml2 rdseed adx snap clflushopt sha_ni xsaveopt xsavec xgetbv1 x
saves clzero arat overflow_recov succor
```

22. sudo grep -c "svm/vmx" /proc/cpuinfo



```
tyt@tyt-virtual-machine:~$ sudo grep -c "svm/vmx" /proc/cpuinfo
0
tyt@tyt-virtual-machine:~$
```

23. sudo apt-get update

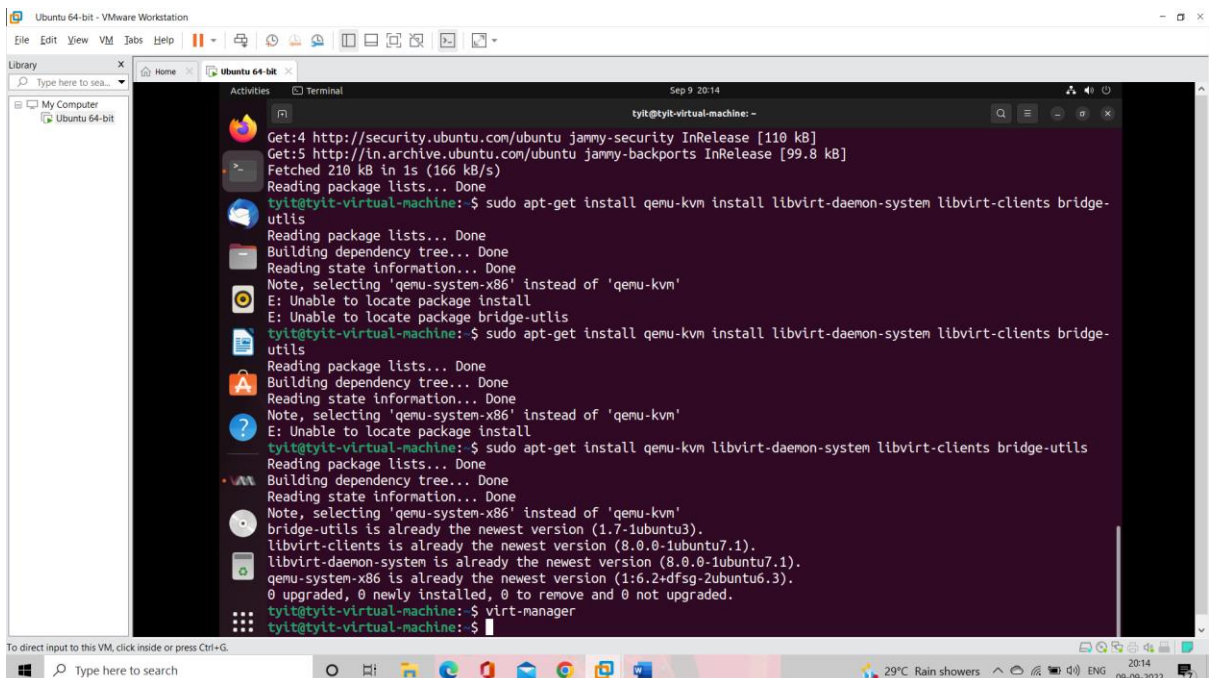


```
tyt@tyt-virtual-machine:~$ cat /proc/cpuinfo
processor       : 1
vendor_id      : AuthenticAMD
cpu family     : 23
model          : 24
model name     : AMD Ryzen 5 3500U with Radeon Vega Mobile Gfx
stepping       : 1
microcode      : 0x0108109
cpu MHz        : 2100.000
cache size     : 512 KB
physical id    : 2
siblings       : 1
core id        : 0
cpu cores      : 1
apicid         : 2
initial apicid : 2
fpu            : yes
fpu_exception  : yes
cpuid level    : 13
wp             : yes
flags          : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush mmx fxsr sse sse2 syscall nx mmxext fxsr_opt pdpe1gb rdtscp lm constant_tsc re
n_good nopl tsc_reliable nonstop_tsc cpuid extd_apicid tsc_known_freq pni pclmulqdq ssse3 fma cx16 sse4_1 sse4_2 x2apic movbe popcnt aes xsave avx f16c rdrand hypervisor lahf_l
n_extapic cr8_legacy don sse4a misalignsse 3dnowprefetch osvw topoext ssbd lbpv vmcall fsgsbase bni1 avx2 snep bn12 rdseed adx snap clflushopt sha_ni xsaveopt xsavec xgetbv1 x
saves_c1zero arat overflow_recov succor
bugs           : fxsave_leak sysret_ss_attrs null_seg spectre_v1 spectre_v2 spec_store_bypass retbleed
bogomips       : 4200.00
tlb size       : 2560 4K pages
clflush size   : 64
cache_alignm   : 64
address sizes  : 45 bits physical, 48 bits virtual
power managem  :

tyt@tyt-virtual-machine:~$ sudo grep -c "svm\vmx" /proc/cpuinfo
0

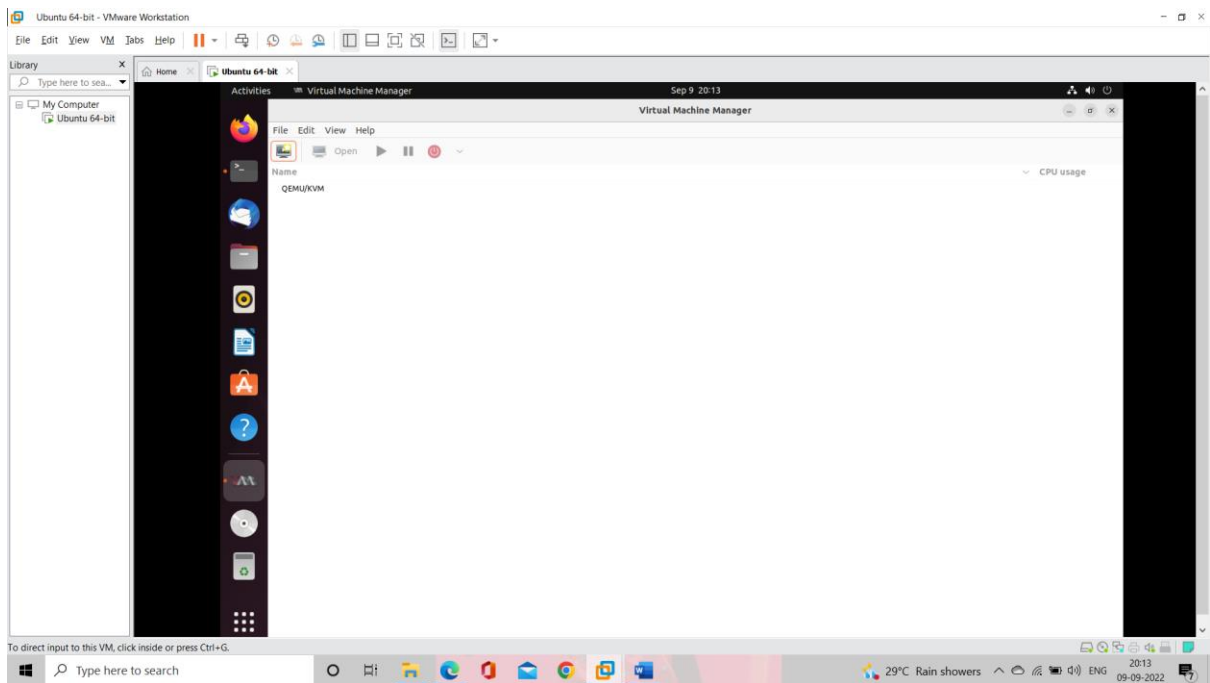
tyt@tyt-virtual-machine:~$ sudo apt-get update
Hit:1 http://in.archive.ubuntu.com/ubuntu jammy InRelease
Hit:2 http://in.archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:3 http://in.archive.ubuntu.com/ubuntu jammy-backports InRelease
Hit:4 http://security.ubuntu.com/ubuntu jammy-security InRelease
Reading package lists... Done
tyt@tyt-virtual-machine:~$
```

24. sudo apt-get install qemu-kvm libvirt-daemon-system libvirt-clients bridge-utils

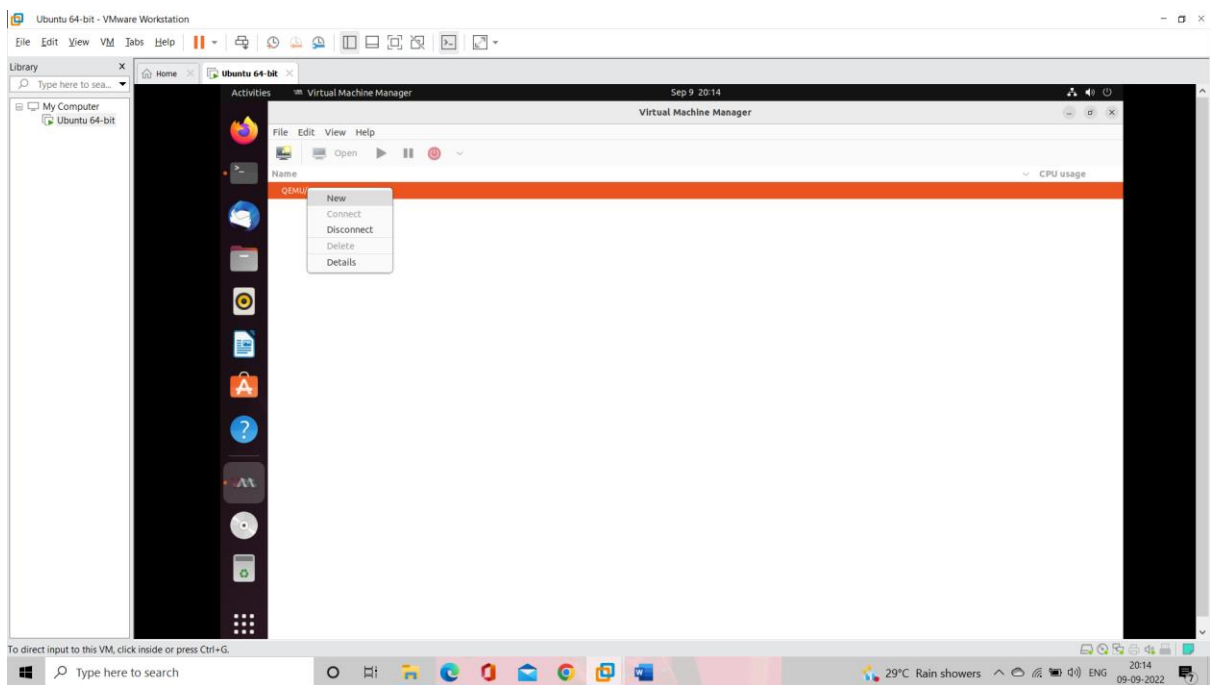


```
tyt@tyt-virtual-machine:~$ sudo apt-get install qemu-kvm libvirt-daemon-system libvirt-clients bridge-utils
Get:4 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Get:5 http://in.archive.ubuntu.com/ubuntu jammy-backports InRelease [99.8 kB]
Fetched 210 kB in 1s (166 kB/s)
Reading package lists... Done
tyt@tyt-virtual-machine:~$ sudo apt-get install qemu-kvm libvirt-daemon-system libvirt-clients bridge-utils
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Note, selecting 'qemu-system-x86' instead of 'qemu-kvm'
E: Unable to locate package install
E: Unable to locate package bridge-utils
tyt@tyt-virtual-machine:~$ sudo apt-get install qemu-kvm libvirt-daemon-system libvirt-clients bridge-utils
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Note, selecting 'qemu-system-x86' instead of 'qemu-kvm'
E: Unable to locate package install
tyt@tyt-virtual-machine:~$ sudo apt-get install qemu-kvm libvirt-daemon-system libvirt-clients bridge-utils
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Note, selecting 'qemu-system-x86' instead of 'qemu-kvm'
bridge-utils is already the newest version (1.7-1ubuntu3).
libvirt-clients is already the newest version (8.0.0-1ubuntu7.1).
libvirt-daemon-system is already the newest version (8.0.0-1ubuntu7.1).
qemu-system-x86 is already the newest version (1:6.2+dfsg-2ubuntu6.3).
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
tyt@tyt-virtual-machine:~$ virt-manager
tyt@tyt-virtual-machine:~$
```

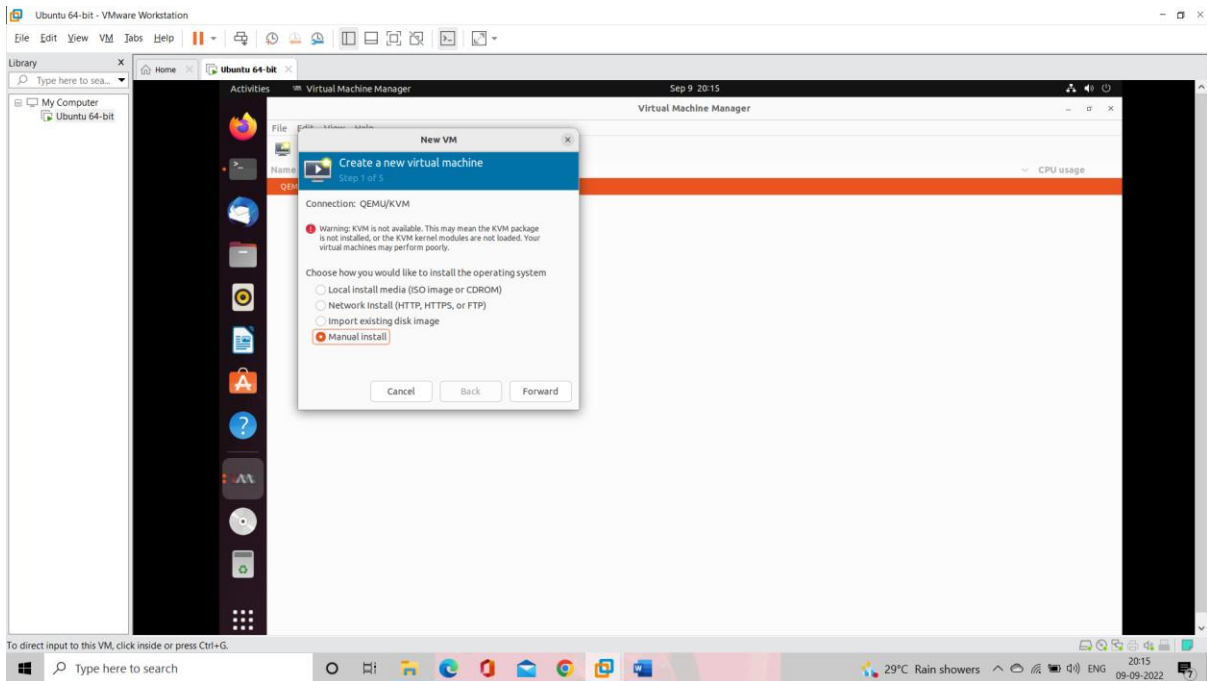
25. Virtual Machine Manager is ready.
26. Output.



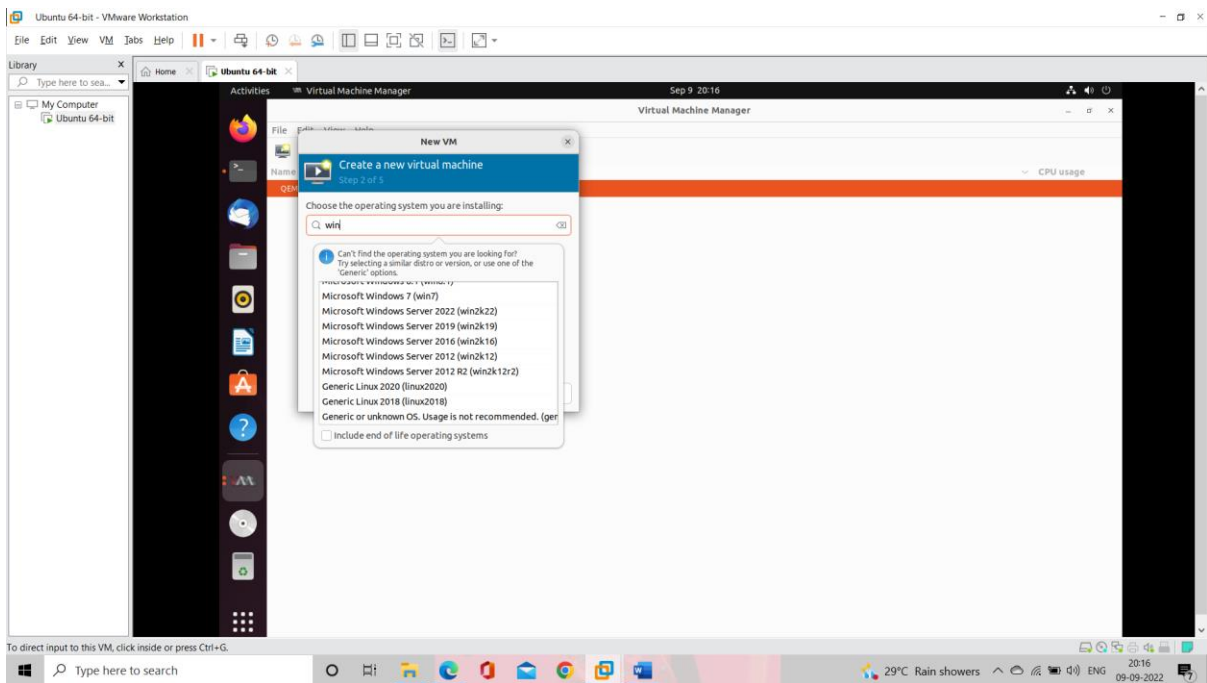
27. Right click on QEMU and select New.



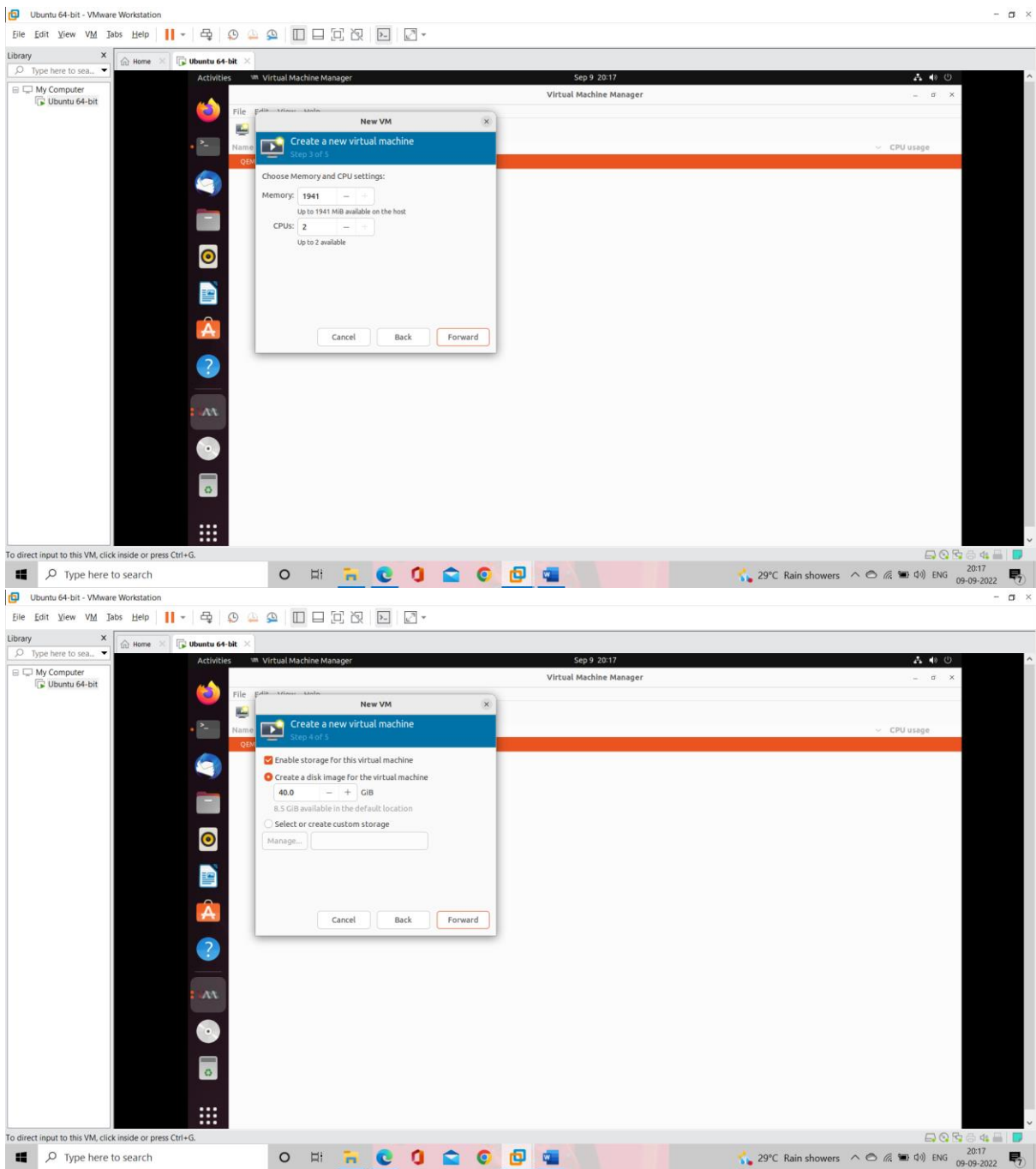
28. Select Manual Install for instant Installation or else you need to download iso of windows and then open it using other options.



29. Install any version of windows you want to work with.



30. . Default Settings.



31. You can see win7 has appeared.

