

1- Install Ansible from my VM-Virtual Box

Update system

```
eb3001@linux: ~  
login as: eb3001  
eb3001@10.0.0.154's password:  
Welcome to Ubuntu 22.04.3 LTS (GNU/Linux 6.5.0-10-generic x86_64)  
  
* Documentation:  https://help.ubuntu.com  
* Management:    https://landscape.canonical.com  
* Support:       https://ubuntu.com/advantage  
  
Expanded Security Maintenance for Applications is not enabled.  
  
212 updates can be applied immediately.  
141 of these updates are standard security updates.  
To see these additional updates run: apt list --upgradable  
  
Enable ESM Apps to receive additional future security updates.  
See https://ubuntu.com/esm or run: sudo pro status  
  
The programs included with the Ubuntu system are free software;  
the exact distribution terms for each program are described in the  
individual files in /usr/share/doc/*/copyright.  
  
Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by  
applicable law.  
  
eb3001@linux:~$ sudo apt update  
/etc/sudoers:14:17: syntax error  
User privilege specification  
^~~~~~  
[sudo] password for eb3001:  
Sorry, try again.  
[sudo] password for eb3001:  
E: Invalid operation update  
eb3001@linux:~$ sudo apt update  
/etc/sudoers:14:17: syntax error  
User privilege specification  
^~~~~~  
Hit:1 http://ca.archive.ubuntu.com/ubuntu jammy InRelease  
Get:2 http://ca.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]  
Get:3 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]  
Hit:4 http://ca.archive.ubuntu.com/ubuntu jammy-backports InRelease  
Fetched 229 kB in 1s (250 kB/s)  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
211 packages can be upgraded. Run 'apt list --upgradable' to see them.  
eb3001@linux:~$
```

After. Sudo apt install ansible

```
eb3001@linux: ~  
Welcome to Ubuntu 22.04.3 LTS (GNU/Linux 6.5.0-10-generic x86_64)  
  
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/etc/sudoers:14:17: syntax error  
User privilege specification  
^~~~~~  
[sudo] password for eb3001:  
Sorry, try again.  
[sudo] password for eb3001:  
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/etc/sudoers:14:17: syntax error  
User privilege specification  
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Hit:1 http://ca.archive.ubuntu.com/ubuntu jammy InRelease  
Get:2 http://ca.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]  
Get:3 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]  
Hit:4 http://ca.archive.ubuntu.com/ubuntu jammy-backports InRelease  
Fetched 229 kB in 1s (250 kB/s)  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
211 packages can be upgraded. Run 'apt list --upgradable' to see them.  
eb3001@linux:~$ sudo apt install ansible  
/etc/sudoers:14:17: syntax error  
User privilege specification  
^~~~~~  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following additional packages will be installed:  
  libseccomp2 python3-babel python3-argcomplete python3-distro python3-dnspython python3-jinja2 python3-jmespath python3-kerberos python3-libcloud python3-netaddr python3-ntlm-auth python3-packaging  
  python3-pygments python3-requests-kerberos python3-requests-ntlm python3-requests-toolbelt python3-selinux python3-simplejson python3-warm python3-wrapt  
Suggested packages:  
  libnss-ldap python3-babel-doc python3-argcomplete-doc python3-distro-doc python3-dnspython-doc python3-jinja2-doc python3-jmespath-doc python3-kerberos-doc python3-libcloud-doc python3-netaddr-doc python3-ntlm-auth-doc python3-packaging-doc  
  python3-pygments-doc python3-requests-kerberos-doc python3-requests-ntlm-doc python3-requests-toolbelt-doc python3-selinux-doc python3-simplejson-doc python3-warm-doc python3-wrapt-doc  
0 upgraded, 21 newly installed, 0 to remove and 0 not upgraded.  
Need to get 24.2 MB of archives.  
After this operation, 272 MB of additional disk space will be used.  
Do you want to continue? [Y/n]
```

Ansible Version

```
eb3001@linux: ~
Unpacking python3-jmespath (0.10.0-1) ...
Selecting previously unselected package python3-kerberos.
Preparing to unpack .../12-python3-kerberos_1.1.14-3.1build5_amd64.deb ...
Unpacking python3-kerberos (1.1.14-3.1build5) ...
Selecting previously unselected package python3-simplejson.
Preparing to unpack .../13-python3-simplejson_3.17.6-1build1_amd64.deb ...
Unpacking python3-simplejson (3.17.6-1build1) ...
Selecting previously unselected package python3-libcloud.
Preparing to unpack .../14-python3-libcloud_3.2.0-2_all.deb ...
Unpacking python3-libcloud (3.2.0-2) ...
Selecting previously unselected package python3-ntlm-auth.
Preparing to unpack .../15-python3-ntlm-auth_1.4.0-1_all.deb ...
Unpacking python3-ntlm-auth (1.4.0-1) ...
Selecting previously unselected package python3-requests-kerberos.
Preparing to unpack .../16-python3-requests-kerberos_0.12.0-2_all.deb ...
Unpacking python3-requests-kerberos (0.12.0-2) ...
Selecting previously unselected package python3-requests-ntlm.
Preparing to unpack .../17-python3-requests-ntlm_1.1.0-1.1_all.deb ...
Unpacking python3-requests-ntlm (1.1.0-1.1) ...
Selecting previously unselected package python3-requests-toolbelt.
Preparing to unpack .../18-python3-requests-toolbelt_0.9.1-1_all.deb ...
Unpacking python3-requests-toolbelt (0.9.1-1) ...
Selecting previously unselected package python3-selinux.
Preparing to unpack .../19-python3-selinux_3.3-1build2_amd64.deb ...
Unpacking python3-selinux (3.3-1build2) ...
Selecting previously unselected package python3-xmltodict.
Preparing to unpack .../20-python3-xmltodict_0.12.0-2_all.deb ...
Unpacking python3-xmltodict (0.12.0-2) ...
Selecting previously unselected package python3-winrm.
Preparing to unpack .../21-python3-winrm_0.3.0-2_all.deb ...
Unpacking python3-winrm (0.3.0-2) ...
Setting up python3-distutils (3.10.8-1~22.04) ...
Setting up python3-requests-toolbelt (0.9.1-1) ...
Setting up python3-ntlm-auth (1.4.0-1) ...
Setting up python3-pycryptodome (3.11.0+dfsg1-3ubuntu0.1) ...
Setting up python3-kerberos (1.1.14-3.1build5) ...
Setting up python3-babel-localedata (2.8.0+dfsg.1-7) ...
Setting up python3-simplejson (3.17.6-1build1) ...
Setting up python3-xmltodict (0.12.0-2) ...
Setting up python3-packaging (21.3-1) ...
Setting up python3-jmespath (0.10.0-1) ...
Setting up python3-requests-kerberos (0.12.0-2) ...
Setting up ieee-data (20210605.1) ...
Setting up python3-dnspython (2.1.0-1ubuntu1) ...
Setting up python3-selinux (3.3-1build2) ...
Setting up python3-argcomplete (1.8.1-1.5) ...
Setting up python3-requests-ntlm (1.1.0-1.1) ...
Setting up python3-babel (2.8.0+dfsg.1-7) ...
update-alternatives: using /usr/bin/pybabel-python3 to provide /usr/bin/pybabel (pybabel) in auto mode
Setting up python3-libcloud (3.2.0-2) ...
Setting up python3-jinja2 (3.0.3-1ubuntu0.1) ...
Setting up python3-netaddr (0.8.0-2) ...
Setting up python3-winrm (0.3.0-2) ...
Setting up ansible (2.10.7+merged+base+2.10.8+dfsg-1) ...
Processing triggers for man-db (2.10.2-1) ...
eb3001@linux:~$ ansible --version
ansible 2.10.8
  config file = None
  configured module search path = ['/home/eb3001/.ansible/plugins/modules', '/usr/share/ansible/plugins/modules']
  ansible python module location = /usr/lib/python3/dist-packages/ansible
  executable location = /usr/bin/ansible
  python version = 3.10.12 (main, Jun 11 2023, 05:26:28) [GCC 11.4.0]
eb3001@linux:~$
```

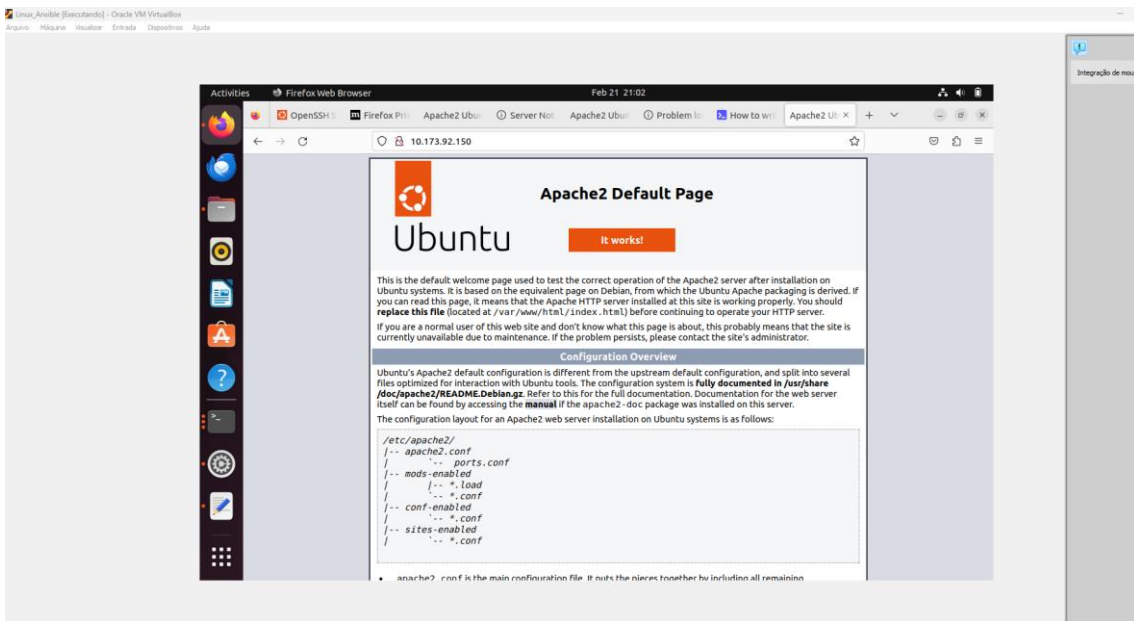
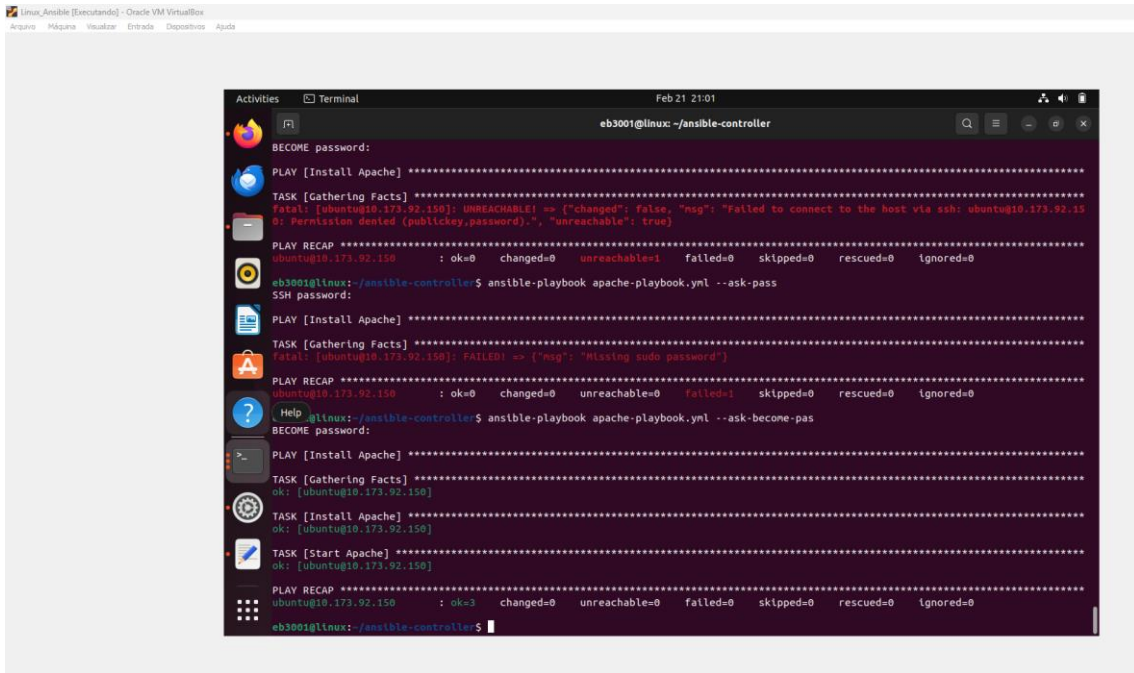
```

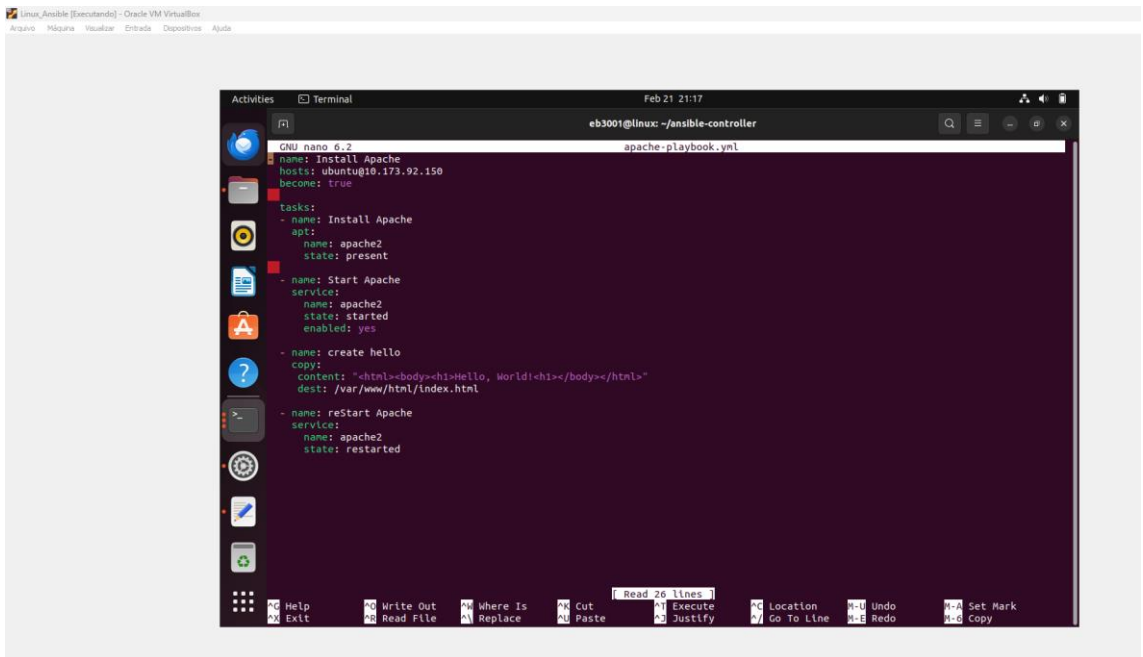
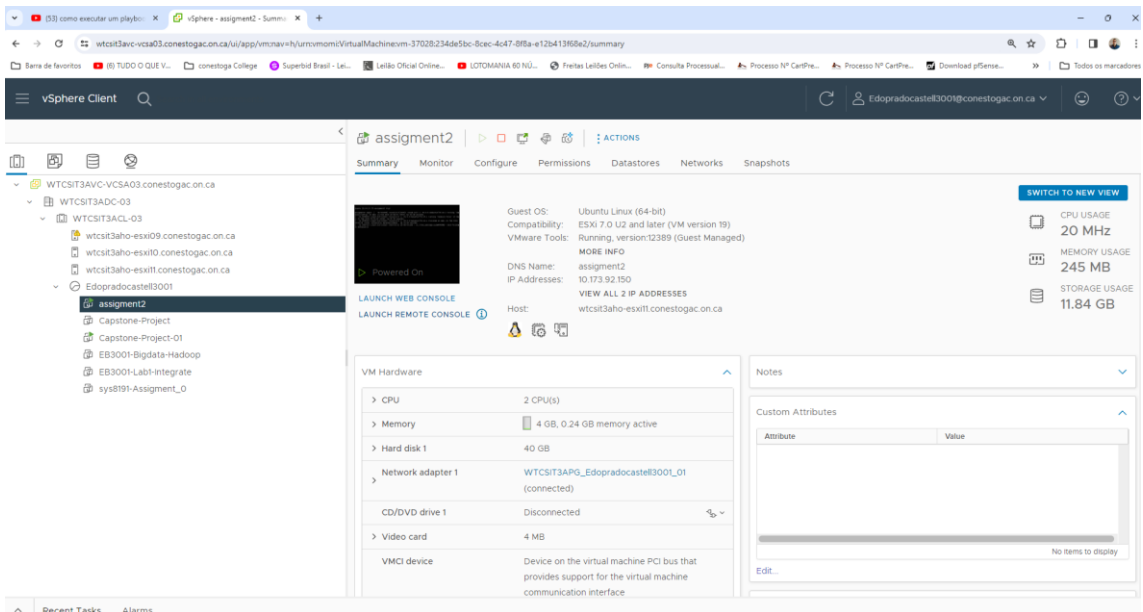
eb3001@linux: ~
Unpacking python3-jmespath (0.10.0-1) ...
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Preparing to unpack .../12-python3-kerberos_1.1.14-3.1build5_amd64.deb ...
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Unpacking python3-simplejson (3.17.6-1build1) ...
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Preparing to unpack .../17-python3-requests-ntlm_1.1.0-1.1_all.deb ...
Unpacking python3-requests-ntlm (1.1.0-1.1) ...
Selecting previously unselected package python3-requests-toolbelt.
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Unpacking python3-xmltodict (0.12.0-2) ...
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Setting up python3-distutils (3.10.8-1-22.04) ...
Setting up python3-requests-toolbelt (0.9.1-1) ...
Setting up python3-ntlm-auth (1.4.0-1) ...
Setting up python3-pycryptodome (3.11.0+dfsg1-3ubuntu0.1) ...
Setting up python3-kerberos (1.1.14-3.1build5) ...
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Setting up python3-simplejson (3.17.6-1build1) ...
Setting up python3-xmltodict (0.12.0-2) ...
Setting up python3-packaging (21.3-1) ...
Setting up python3-jmespath (0.10.0-1) ...
Setting up python3-requests-kerberos (0.12.0-2) ...
Setting up ieee-data (20210605.1) ...
Setting up python3-dnspython (2.1.0-lubuntu1) ...
Setting up python3-selinux (3.3-1build2) ...
Setting up python3-argcomplete (1.8.1-1.5) ...
Setting up python3-requests-ntlm (1.1.0-1.1) ...
Setting up python3-babel (2.8.0+dfsg.1-7) ...
update-alternatives: using /usr/bin/pybabel-python3 to provide /usr/bin/pybabel (pybabel) in auto mode
Setting up python3-libcloud (3.2.0-2) ...
Setting up python3-jinja2 (3.0.3-lubuntu0.1) ...
Setting up python3-netaddr (0.8.0-2) ...
Setting up python3-winrm (0.3.0-2) ...
Setting up ansible (2.10.7+merged+base+2.10.8+dfsg-1) ...
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eb3001@linux:~$ ansible --version
ansible 2.10.8
  config file = None
  configured module search path = ['/home/eb3001/.ansible/plugins/modules', '/usr/share/ansible/plugins/modules']
  ansible python module location = /usr/lib/python3/dist-packages/ansible
  executable location = /usr/bin/ansible
  python version = 3.10.12 (main, Jun 11 2023, 05:26:28) [GCC 11.4.0]
eb3001@linux:~$

```

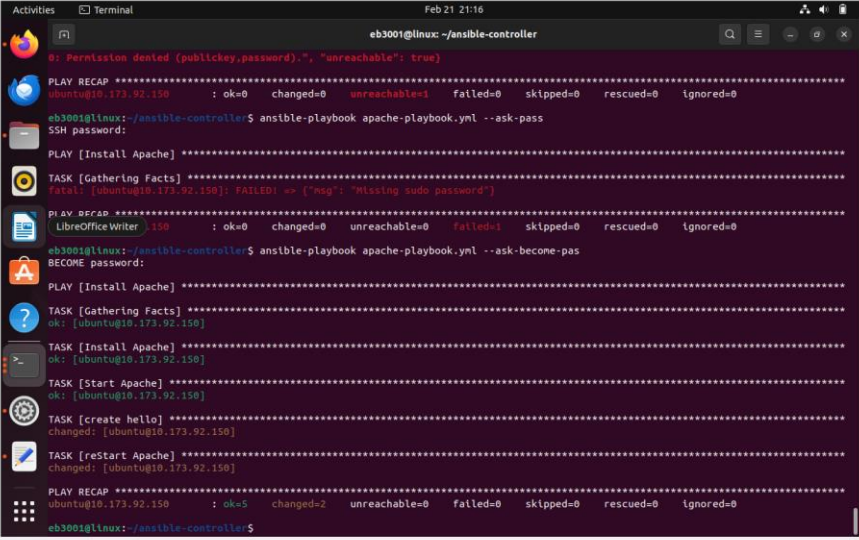
Install Vagrant

```
eb3001@linux: ~
Created symlink /etc/systemd/system/multi-user.target.wants/run-qemu.mount -> /lib/systemd/system/run-qemu.mount.
Setting up ruby-rubygems (3.3.5-2) ...
Setting up liblvm2cmd2.03:amd64 (2.03.11-2.lubuntu4) ...
Setting up ruby3.0 (3.0.2-7ubuntu2.4) ...
Setting up dmeventd (2:1.02.175-2.lubuntu4) ...
Created symlink /etc/systemd/system/sockets.target.wants/dm-event.socket -> /lib/systemd/system/dm-event.socket.
dm-event.service is a disabled or a static unit, not starting it.
Setting up lvm2 (2.03.11-2.lubuntu4) ...
update-initramfs: deferring update (trigger activated)
Created symlink /etc/systemd/system/sysinit.target.wants/blk-availability.service -> /lib/systemd/system/blk-availability.service.
Created symlink /etc/systemd/system/sysinit.target.wants/lvm2-monitor.service -> /lib/systemd/system/lvm2-monitor.service.
Created symlink /etc/systemd/system/sysinit.target.wants/lvm2-lvmpolld.socket -> /lib/systemd/system/lvm2-lvmpolld.socket.
Setting up libguestfs0:amd64 (1:1.46.2-10ubuntu3) ...
Setting up ruby (1:3.0~expl) ...
Setting up guestmount (1:1.46.2-10ubuntu3) ...
Setting up racc (1.4.14-2) ...
Setting up libguestfs-xfs:amd64 (1:1.46.2-10ubuntu3) ...
Setting up ruby-pkg-config (1.4.6-2) ...
Setting up rake (13.0.6-2) ...
Setting up ruby-mime-types-data (3.2015.1120-2) ...
Setting up libguestfs-perl (1:1.46.2-10ubuntu3) ...
Setting up guestfs-tools (1.46.1-4ubuntu2) ...
Setting up ruby-multi-json (1.14.1-1) ...
Setting up libguestfs-hfsplus:amd64 (1:1.46.2-10ubuntu3) ...
Setting up guestfish (1:1.46.2-10ubuntu3) ...
Setting up libruby3.0:amd64 (3.0.2-7ubuntu2.4) ...
Setting up ruby-bcrypt-pbkdf:amd64 (1.1.0-2) ...
Setting up ruby-nokogiri (1.13.1+dfsg-2) ...
Setting up libguestfs-reiserfs:amd64 (1:1.46.2-10ubuntu3) ...
Setting up ruby-libvirt (0.7.1-1.build1) ...
Setting up ruby-ed25519:amd64 (1.3.0+ds-1) ...
Setting up ruby-formatador (0.2.5-3) ...
Setting up ruby-oj:amd64 (3.13.9-1.build1) ...
Setting up ruby-erubi (1.9.0-2) ...
Setting up ruby-log4r (1.1.10-4.1) ...
Setting up libguestfs-tools (1:1.46.2-10ubuntu3) ...
Setting up ruby-fog-json (1.2.0-1) ...
Setting up ruby-mime-types (3.3.1-1) ...
Setting up ruby-ffi:amd64 (1.15.4+dfsg-2) ...
Setting up ruby-rb-inotify (0.9.10-2) ...
Setting up virt-p2v (1.42.0-4) ...
Setting up ruby-net-ssh (1:6.1.0-2ubuntu0.1) ...
Setting up ruby-vagrant-cloud (3.0.5-1) ...
Setting up ruby-childprocess (4.1.0-1) ...
Setting up ruby-net-scp (3.0.0-1) ...
Setting up ruby-net-sftp (1:3.0.0-1) ...
Setting up ruby-listen (3.7.0-1) ...
Setting up vagrant (2.2.19+dfsg-lubuntu1) ...
Setting up ruby-fog-core (2.1.0-3.1) ...
Setting up ruby-fog-xml (0.1.1-5.1) ...
Setting up ruby-fog-libvirt (0.8.0-1) ...
Setting up vagrant-libvirt (0.7.0-1) ...
Processing triggers for install-info (6.8-4build1) ...
Processing triggers for fontconfig (2.13.1-4.2ubuntu5) ...
Processing triggers for initramfs-tools (0.140ubuntu3.2) ...
update-initramfs: Generating /boot/initrd.img-6.5.0-18-generic
Processing triggers for hicolor-icon-theme (0.17-2) ...
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for dbus (1.12.20-2ubuntu4.1) ...
eb3001@linux:~$ vagrant --version
Vagrant 2.2.19
eb3001@linux:~$
```





Last task- Change index.html for -> Hello World

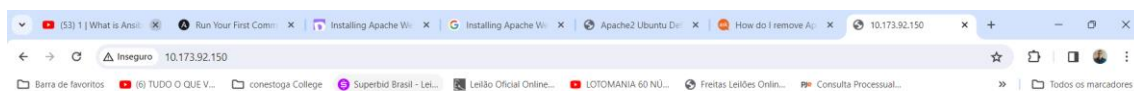


```
eb3001@linux: ~/ansible-controller
0: Permission denied (publickey,password)., "unreachable": true)
PLAY RECAP *****
ubuntu@10.173.92.150 : ok=0  changed=0  unreachable=1  failed=0  skipped=0  rescued=0  ignored=0

eb3001@linux: ~/ansible-controller$ ansible-playbook apache-playbook.yml --ask-pass
PLAY [Install Apache] *****
TASK [Gathering Facts] *****
fatal: [ubuntu@10.173.92.150]: FAILED! => ("msg": "Missing sudo password")
PLAY RECAP *****
LibreOfficeWriter : ok=0  changed=0  unreachable=0  failed=1  skipped=0  rescued=0  ignored=0

eb3001@linux: ~/ansible-controller$ ansible-playbook apache-playbook.yml --ask-become-pass
BECOME password:
PLAY [Install Apache] *****
TASK [Gathering Facts] *****
ok: [ubuntu@10.173.92.150]
TASK [Install Apache] *****
ok: [ubuntu@10.173.92.150]
TASK [Start Apache] *****
ok: [ubuntu@10.173.92.150]
TASK [create hello] *****
changed: [ubuntu@10.173.92.150]
TASK [reStart Apache] *****
changed: [ubuntu@10.173.92.150]
PLAY RECAP *****
ubuntu@10.173.92.150 : ok=5  changed=2  unreachable=0  failed=0  skipped=0  rescued=0  ignored=0

eb3001@linux: ~/ansible-controller$
```



Hello, World!