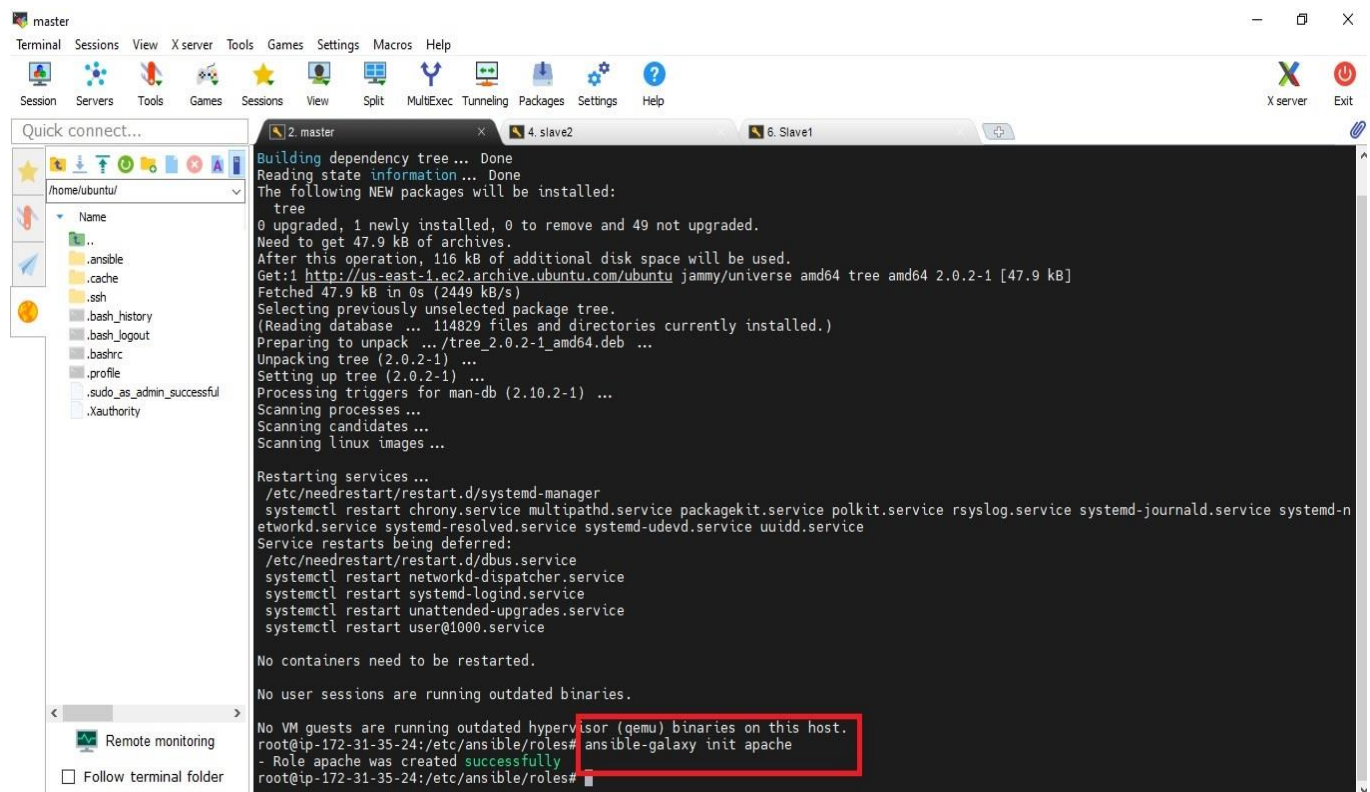


Tasks To Be Performed:

1. Create 2 Ansible roles
2. Install Apache2 on slave1 using one role and NGINX on slave2 using the other role
3. Above should be implemented using different Ansible roles

1) Create a folder and initialized and install tree.



```
master
Terminal Sessions View X server Tools Games Settings Macros Help
Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help
Quick connect...
/home/ubuntu/
Name
..
.ansible
.cache
.ssh
.bash_history
.bash_logout
.bashrc
.profile
.sudo_as_admin_successful
.xauthority

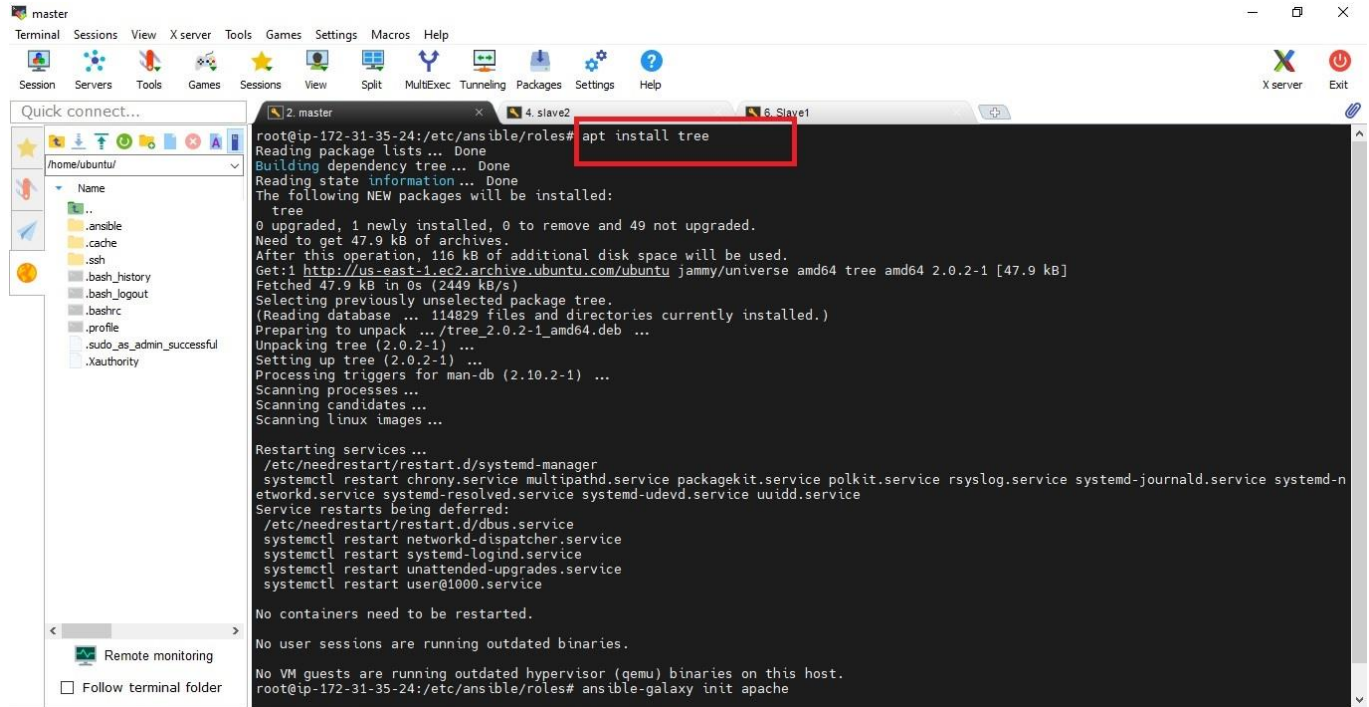
[2: master] x 4: slave2 6: Slave1
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
  tree
0 upgraded, 1 newly installed, 0 to remove and 49 not upgraded.
Need to get 47.9 kB of archives.
After this operation, 116 kB of additional disk space will be used.
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 tree amd64 2.0.2-1 [47.9 kB]
Fetched 47.9 kB in 0s (2449 kB/s)
Selecting previously unselected package tree.
(Reading database ... 114829 files and directories currently installed.)
Preparing to unpack .../tree_2.0.2-1_amd64.deb ...
Unpacking tree (2.0.2-1) ...
Setting up tree (2.0.2-1) ...
Processing triggers for man-db (2.10.2-1) ...
Scanning processes ...
Scanning candidates ...
Scanning linux images ...

Restarting services ...
/etc/needrestart/restart.d/systemd-manager
systemctl restart chrony.service multipathd.service packagekit.service polkit.service rsyslog.service systemd-journald.service systemd-n
etworkd.service systemd-resolved.service systemd-udev.service systemd-udevd.service uuidm.service
Service restarts being deferred:
/etc/needrestart/restart.d/dbus.service
systemctl restart networkd-dispatcher.service
systemctl restart systemd-logind.service
systemctl restart unattended-upgrades.service
systemctl restart user@1000.service

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
root@ip-172-31-35-24:/etc/ansible/roles# ansible-galaxy init apache
- Role apache was created successfully
root@ip-172-31-35-24:/etc/ansible/roles#
```



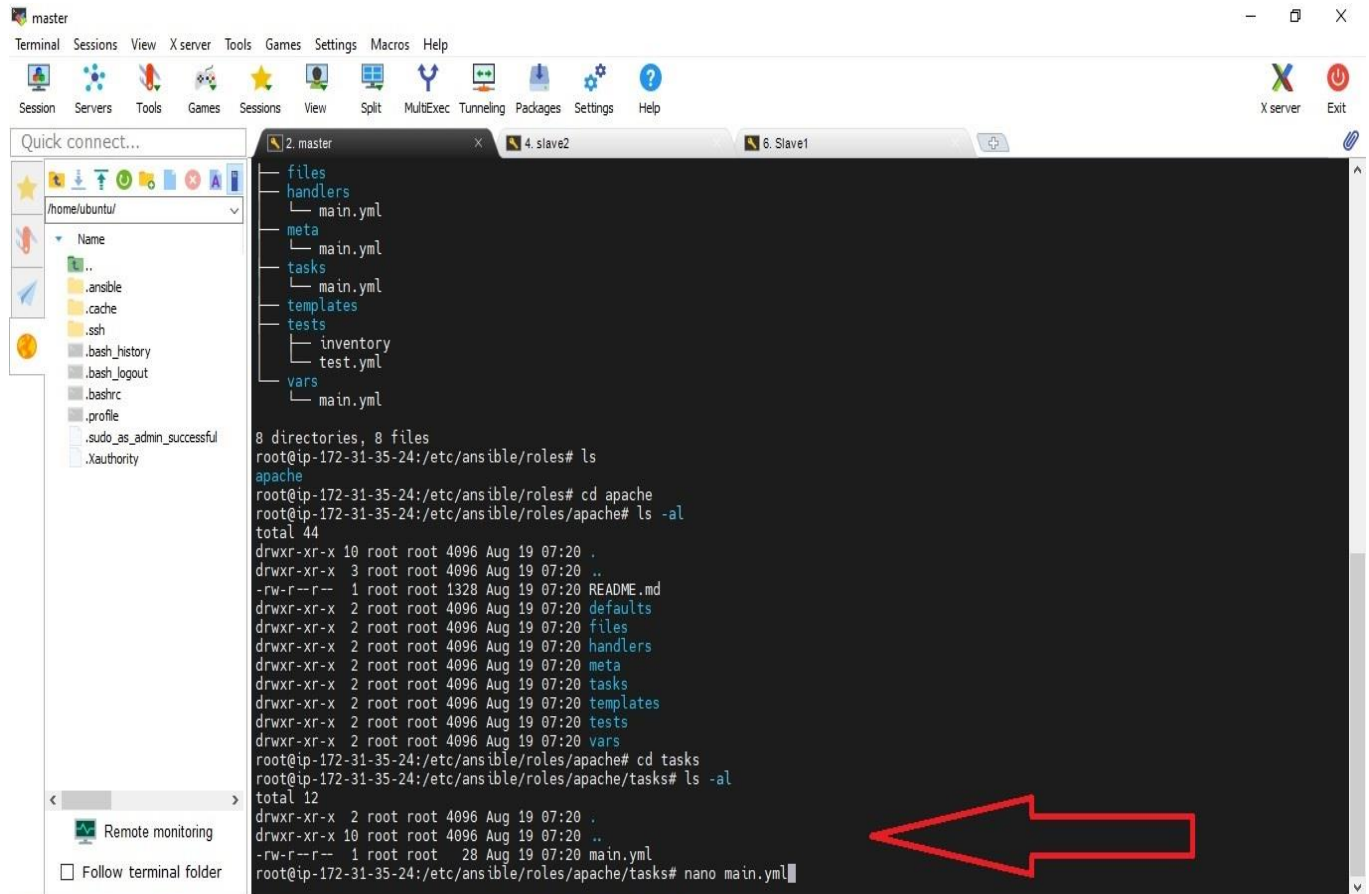
```
root@ip-172-31-35-24:/etc/ansible/roles# apt install tree
Reading package lists ... Done
Building dependency tree ... Done
Reading state information ... Done
The following NEW packages will be installed:
tree
0 upgraded, 1 newly installed, 0 to remove and 49 not upgraded.
Need to get 47.9 kB of archives.
After this operation, 116 kB of additional disk space will be used.
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 tree amd64 2.0.2-1 [47.9 kB]
Fetched 47.9 kB in 0s (2449 kB/s)
Selecting previously unselected package tree.
(Reading database ... 114829 files and directories currently installed.)
Preparing to unpack .../tree_2.0.2-1_amd64.deb ...
Unpacking tree (2.0.2-1) ...
Setting up tree (2.0.2-1) ...
Processing triggers for man-db (2.10.2-1) ...
Scanning processes ...
Scanning candidates ...
Scanning linux images ...

Restarting services ...
/etc/needrestart/restart.d/systemd-manager
systemctl restart chrony.service multipathd.service packagekit.service polkit.service rsyslog.service systemd-journald.service systemd-networkd.service systemd-resolved.service systemd-udevd.service uidd.service
Service restarts being deferred:
/etc/needrestart/restart.d/dbus.service
systemctl restart networkd-dispatcher.service
systemctl restart systemd-logind.service
systemctl restart unattended-upgrades.service
systemctl restart user@1000.service

No containers need to be restarted.

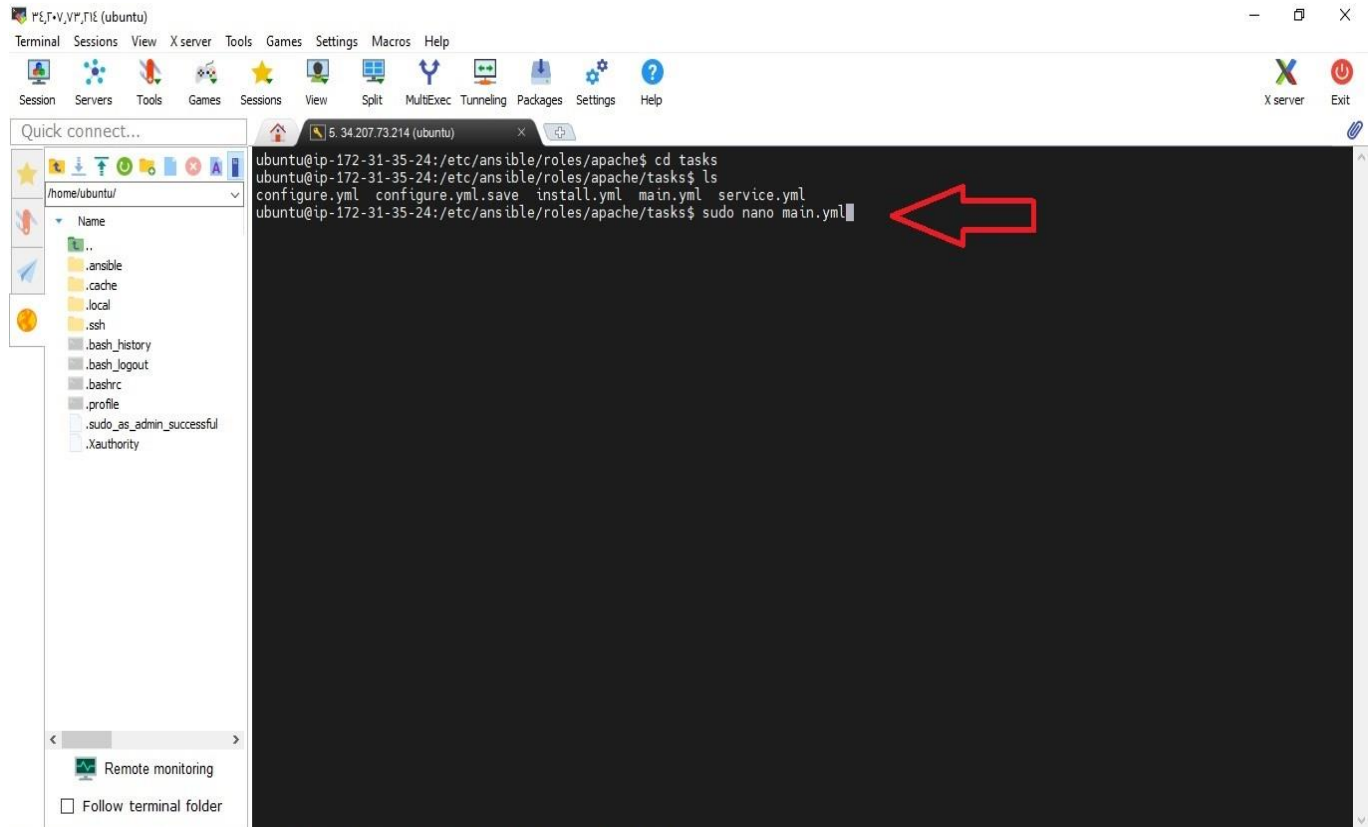
No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
root@ip-172-31-35-24:/etc/ansible/roles# ansible-galaxy init apache
```

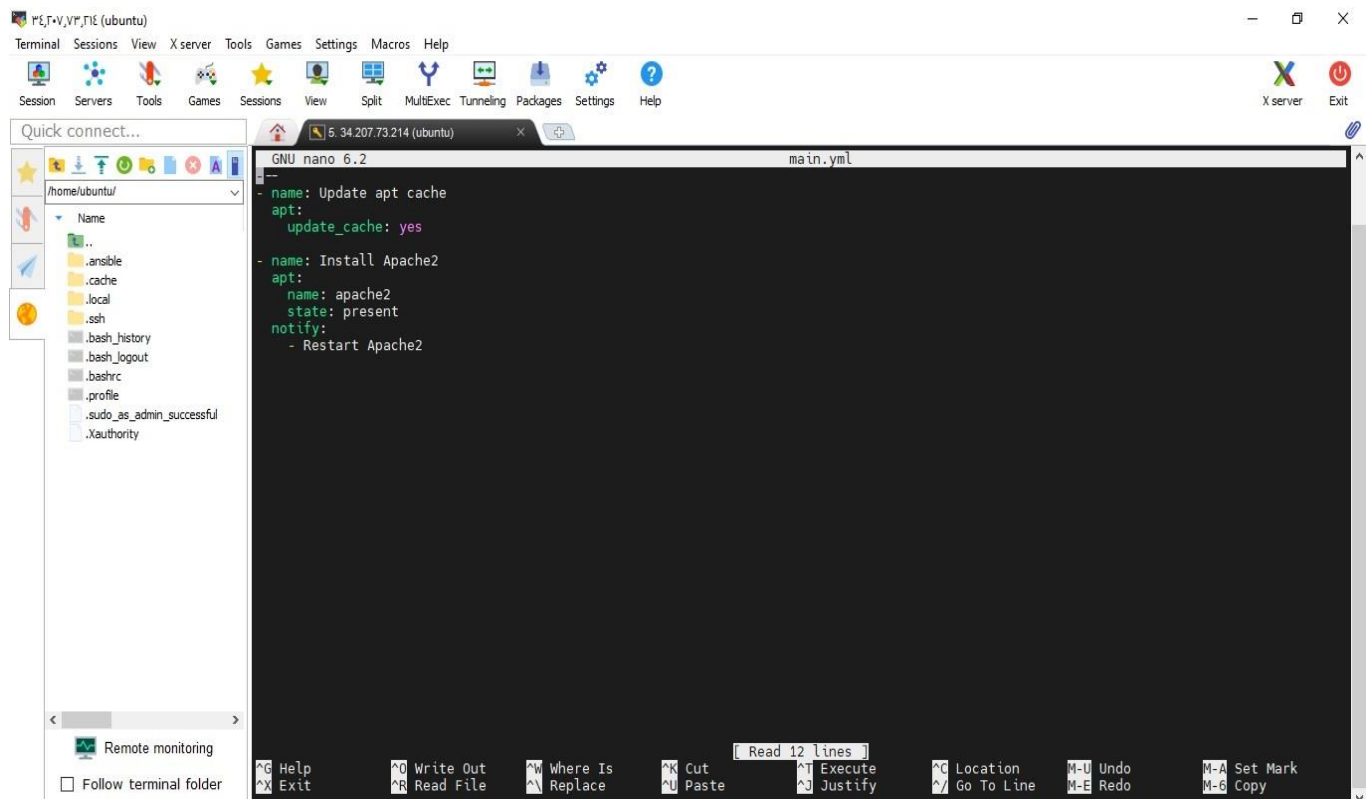


```
files
handlers
├── main.yml
├── meta
│   └── main.yml
├── tasks
│   └── main.yml
├── templates
├── tests
│   ├── inventory
│   └── test.yml
└── vars
    └── main.yml

8 directories, 8 files
root@ip-172-31-35-24:/etc/ansible/roles# ls
ansible
root@ip-172-31-35-24:/etc/ansible/roles# cd apache
root@ip-172-31-35-24:/etc/ansible/roles/apache# ls -al
total 44
drwxr-xr-x 10 root root 4096 Aug 19 07:20 .
drwxr-xr-x  3 root root 4096 Aug 19 07:20 ..
-rw-r--r--  1 root root 1328 Aug 19 07:20 README.md
drwxr-xr-x  2 root root 4096 Aug 19 07:20 defaults
drwxr-xr-x  2 root root 4096 Aug 19 07:20 files
drwxr-xr-x  2 root root 4096 Aug 19 07:20 handlers
drwxr-xr-x  2 root root 4096 Aug 19 07:20 meta
drwxr-xr-x  2 root root 4096 Aug 19 07:20 tasks
drwxr-xr-x  2 root root 4096 Aug 19 07:20 templates
drwxr-xr-x  2 root root 4096 Aug 19 07:20 tests
drwxr-xr-x  2 root root 4096 Aug 19 07:20 vars
root@ip-172-31-35-24:/etc/ansible/roles/apache# cd tasks
root@ip-172-31-35-24:/etc/ansible/roles/apache/tasks# ls -al
total 12
drwxr-xr-x  2 root root 4096 Aug 19 07:20 .
drwxr-xr-x 10 root root 4096 Aug 19 07:20 ..
-rw-r--r--  1 root root  28 Aug 19 07:20 main.yml
root@ip-172-31-35-24:/etc/ansible/roles/apache/tasks# nano main.yml
```

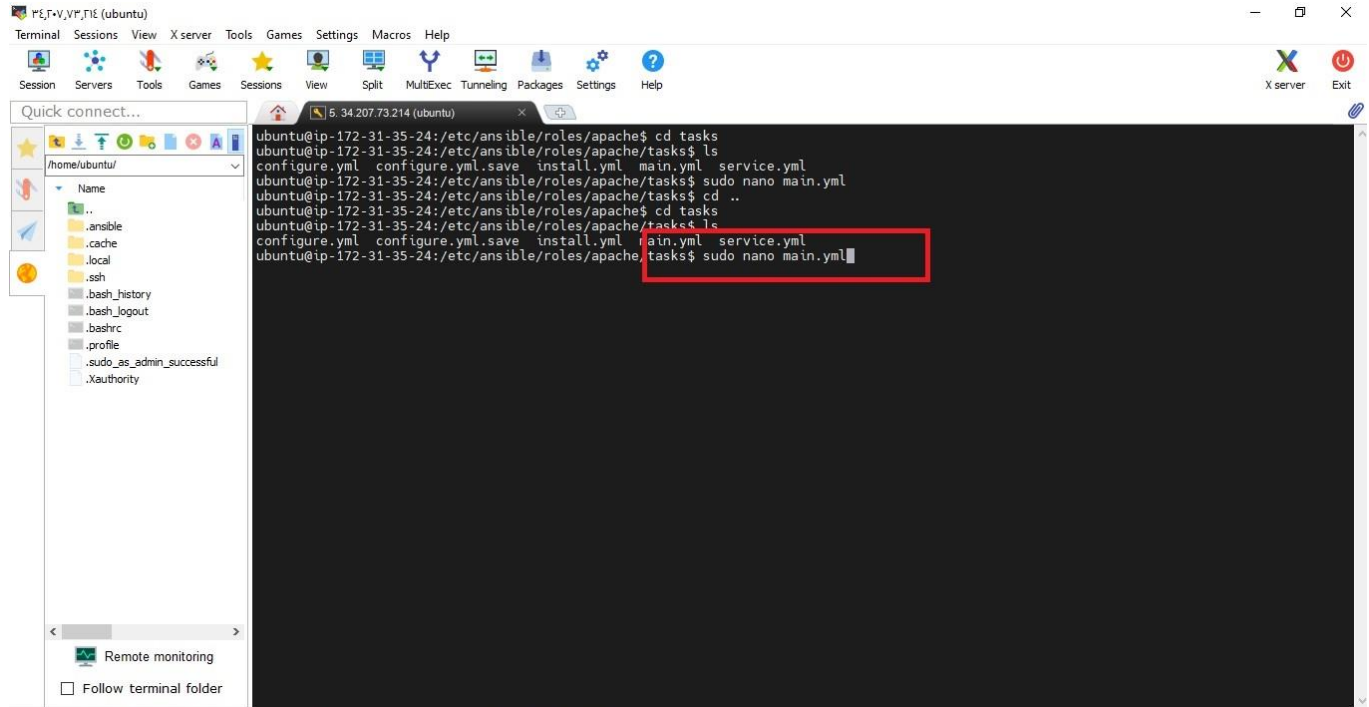


```
ubuntu@ip-172-31-35-24:/etc/ansible/roles/apache$ cd tasks
ubuntu@ip-172-31-35-24:/etc/ansible/roles/apache/tasks$ ls
configure.yml  configure.yml.save  install.yml  main.yml  service.yml
ubuntu@ip-172-31-35-24:/etc/ansible/roles/apache/tasks$ sudo nano main.yml
```



```
GNU nano 6.2 main.yml
--
- name: Update apt cache
  apt:
    update_cache: yes

- name: Install Apache2
  apt:
    name: apache2
    state: present
  notify:
    - Restart Apache2
```

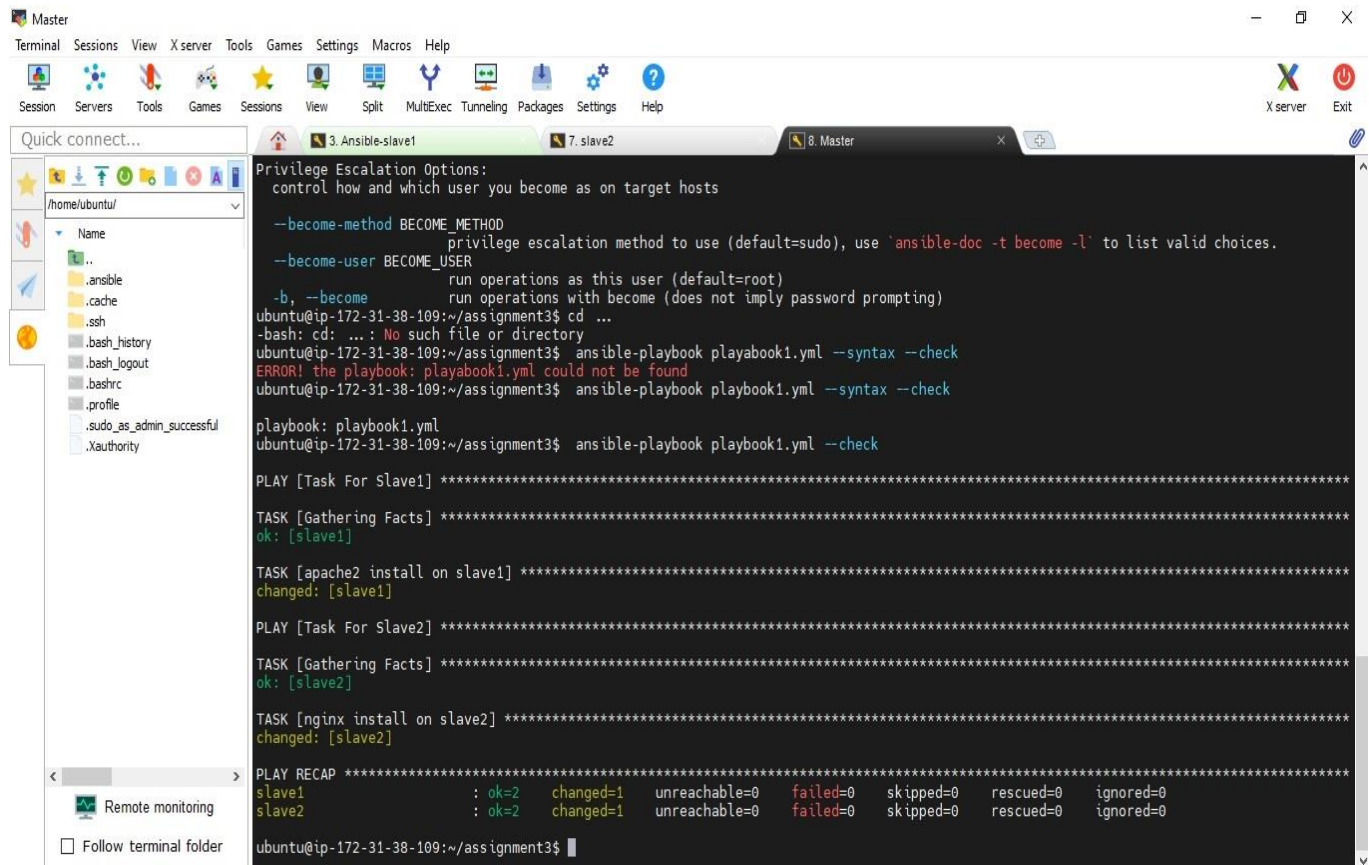


The screenshot shows a terminal window titled "6. 34.207.73.214 (ubuntu)". The user is in the directory `/etc/ansible/roles/apache/tasks`. The commands executed are:

```

ubuntu@ip-172-31-35-24:/etc/ansible/roles/apache$ cd tasks
ubuntu@ip-172-31-35-24:/etc/ansible/roles/apache/tasks$ ls
configure.yml  configure.yml.save  install.yml  main.yml  service.yml
ubuntu@ip-172-31-35-24:/etc/ansible/roles/apache/tasks$ sudo nano main.yml
ubuntu@ip-172-31-35-24:/etc/ansible/roles/apache/tasks$ cd ..
ubuntu@ip-172-31-35-24:/etc/ansible/roles/apache$ cd tasks
ubuntu@ip-172-31-35-24:/etc/ansible/roles/apache/tasks$ ls
configure.yml  configure.yml.save  install.yml  main.yml  service.yml
ubuntu@ip-172-31-35-24:/etc/ansible/roles/apache/tasks$ sudo nano main.yml
  
```

The last command, `sudo nano main.yml`, is highlighted with a red box.



The screenshot shows a terminal window titled "3. Ansible-slave1" and "7. slave2". The user is in the directory `/home/ubuntu`. The commands executed are:

```

ubuntu@ip-172-31-38-109:~/assignment3$ cd ...
-bash: cd: ...: No such file or directory
ubuntu@ip-172-31-38-109:~/assignment3$ ansible-playbook playbook1.yml --syntax --check
ERROR! the playbook: playbook1.yml could not be found
ubuntu@ip-172-31-38-109:~/assignment3$ ansible-playbook playbook1.yml --syntax --check
playbook: playbook1.yml
ubuntu@ip-172-31-38-109:~/assignment3$ ansible-playbook playbook1.yml --check

PLAY [Task For Slave1] *****

TASK [Gathering Facts] *****
ok: [slave1]

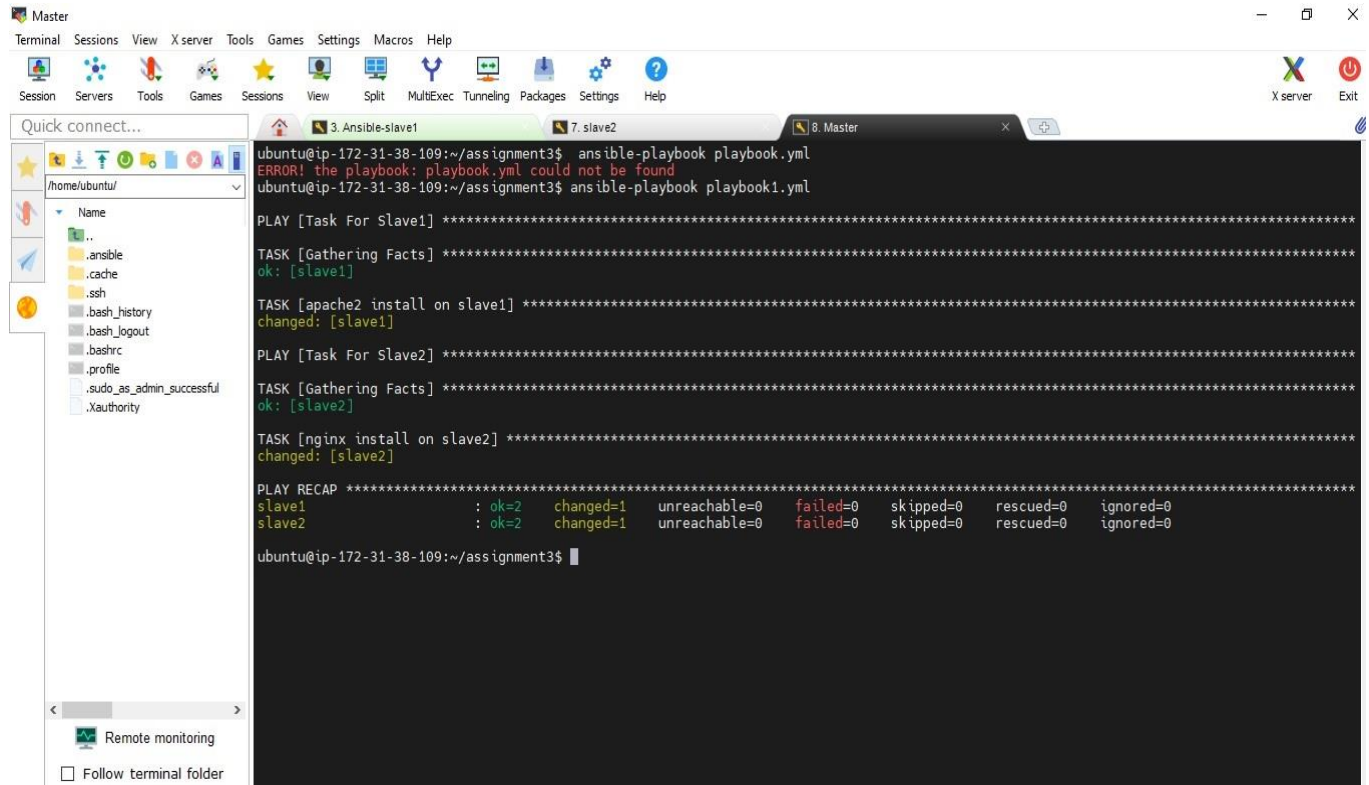
TASK [apache2 install on slave1] *****
changed: [slave1]

PLAY [Task For Slave2] *****

TASK [Gathering Facts] *****
ok: [slave2]

TASK [nginx install on slave2] *****
changed: [slave2]

PLAY RECAP *****
slave1      : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
slave2      : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
ubuntu@ip-172-31-38-109:~/assignment3$
  
```

```

Master
Terminal Sessions View X server Tools Games Settings Macros Help
Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help
Quick connect...
/home/ubuntu/
Name
..
ansible
.cache
.ssh
.bash_history
.bash_logout
.bashrc
.profile
.sudo_as_admin_successful
.xauthority
Remote monitoring
Follow terminal folder

ubuntu@ip-172-31-38-109:~/assignment3$ ansible-playbook playbook.yml
ERROR! the playbook: playbook.yml could not be found
ubuntu@ip-172-31-38-109:~/assignment3$ ansible-playbook playbook1.yml

PLAY [Task For Slave1] *****

TASK [Gathering Facts] *****
ok: [slave1]

TASK [apache2 install on slave1] *****
changed: [slave1]

PLAY [Task For Slave2] *****

TASK [Gathering Facts] *****
ok: [slave2]

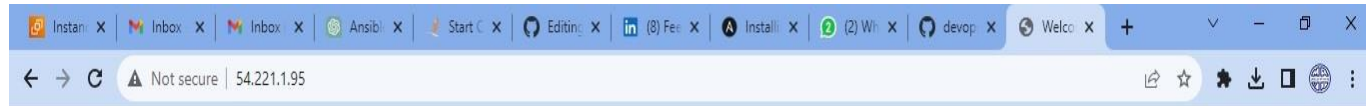
TASK [nginx install on slave2] *****
changed: [slave2]

PLAY RECAP *****
slave1      : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
slave2      : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

ubuntu@ip-172-31-38-109:~/assignment3$

```





Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

Thank you for using nginx.

All the steps completed and screenshot also attached, still if any thing requires, please email me or call me on my registered number and please share the obtained marks on my email.