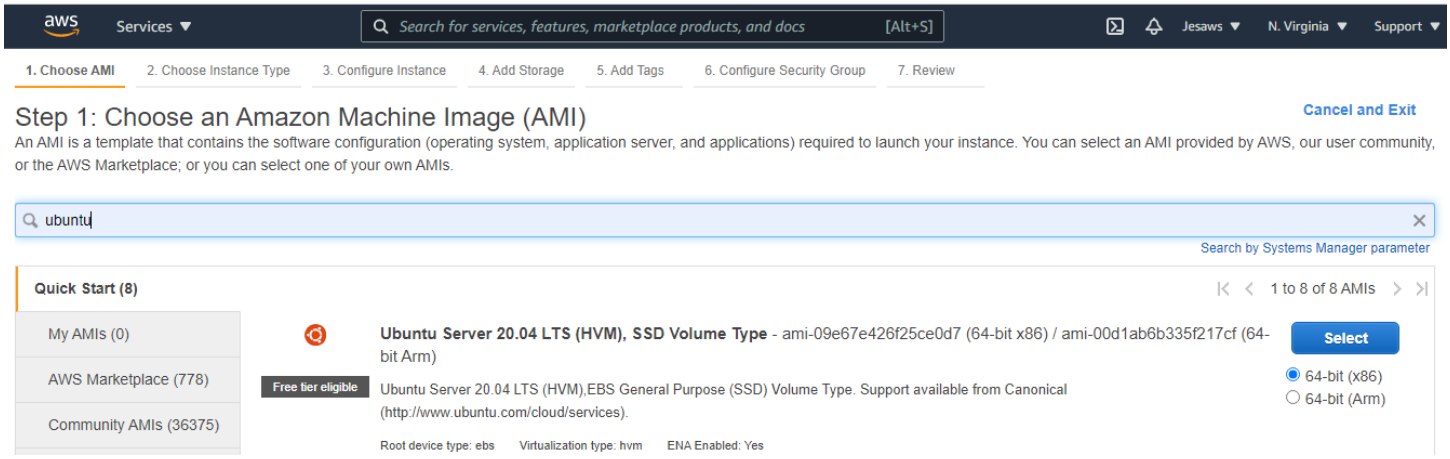
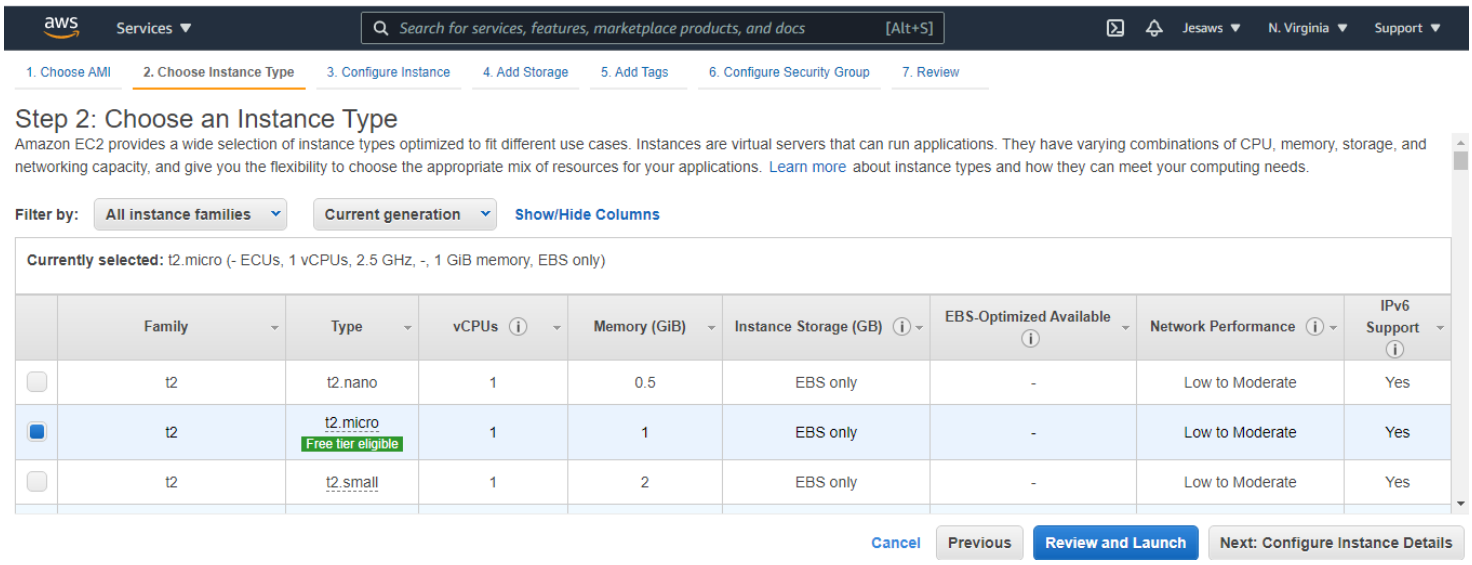
TASK - ANSIBLE IN UBUNTU INSTALLATION

Step 1: Launch the Ubuntu instance :

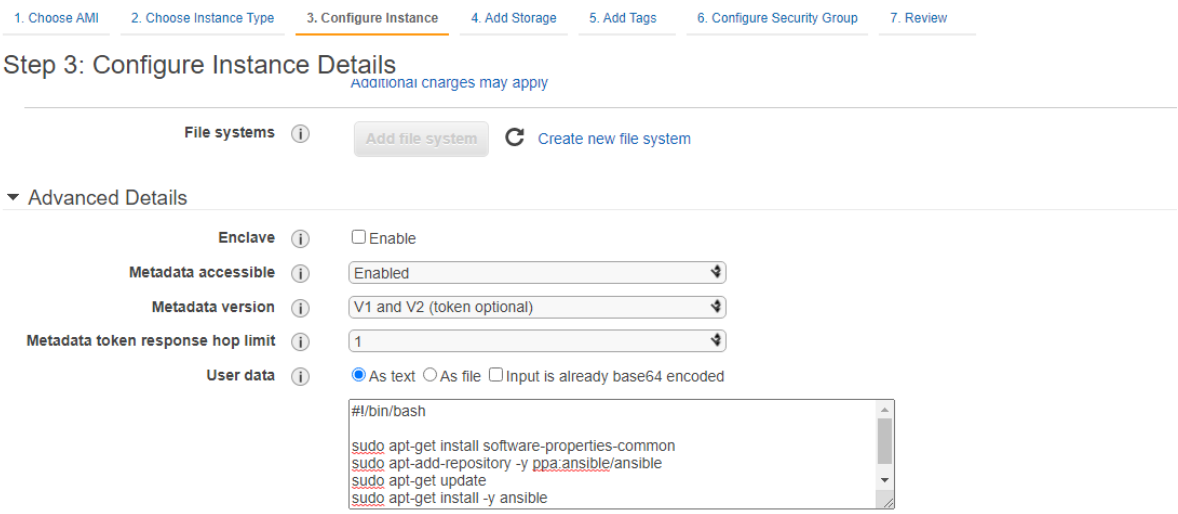


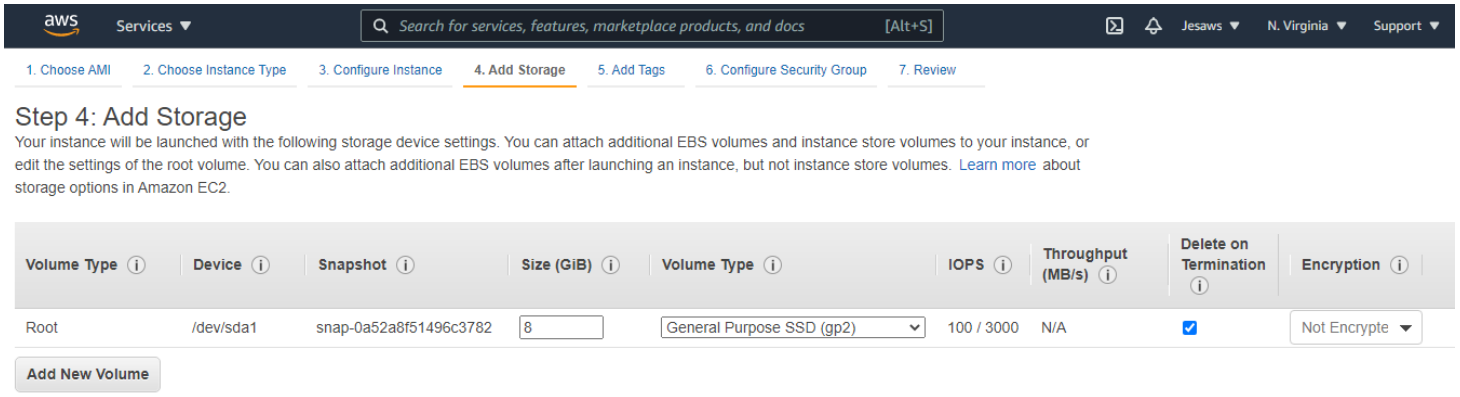


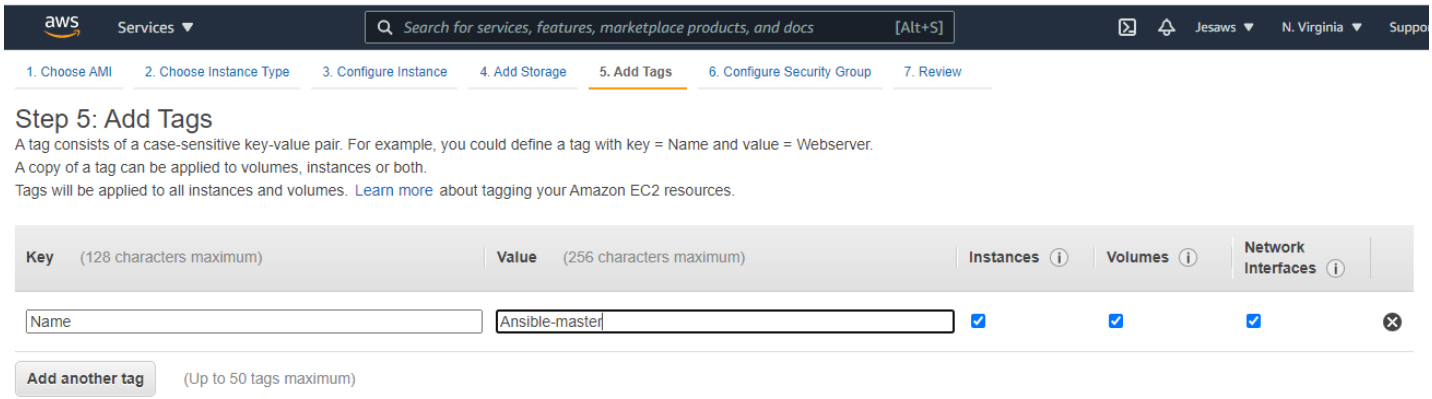
Step 2: User data:

```
#!/bin/bash

sudo apt-get install software-properties-common
sudo apt-add-repository -y ppa:ansible/ansible
sudo apt-get update
sudo apt-get install -y ansible
```




Services
Search for services, features, marketplace products, and docs [Alt+S]
Jesaws
N. Virginia
Support
1. Choose AMI
2. Choose Instance Type
3. Configure Instance
4. Add Storage
5. Add Tags
6. Configure Security Group
7. Review
Step 4: Add Storage
Your instance will be launched with the following storage device settings. You can attach additional EBS volumes and instance store volumes to your instance, or edit the settings of the root volume. You can also attach additional EBS volumes after launching an instance, but not instance store volumes. Learn more about storage options in Amazon EC2.
Volume Type
Device
Snapshot
Size (GiB)
Volume Type
IOPS
Throughput (MB/s)
Delete on Termination
Encryption
Root
/dev/sda1
snap-0a52a8f51496c3782
8
General Purpose SSD (gp2)
100 / 3000
N/A
Not Encrypte
Add New Volume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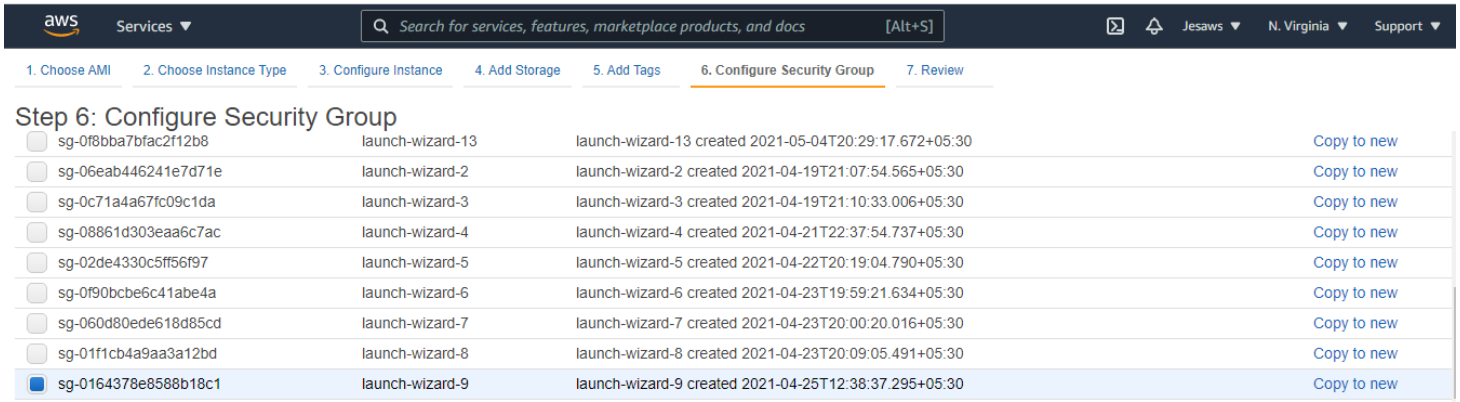
Step 5: Add Tags
A tag consists of a case-sensitive key-value pair. For example, you could define a tag with key = Name and value = Webserver.
A copy of a tag can be applied to volumes, instances or both.
Tags will be applied to all instances and volumes. Learn more about tagging your Amazon EC2 resources.
Key (128 characters maximum)
Value (256 characters maximum)
Instances
Volumes
Network Interfaces
Name
Ansible-master
Add another tag
(Up to 50 tags maximum)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N. Virginia
Support
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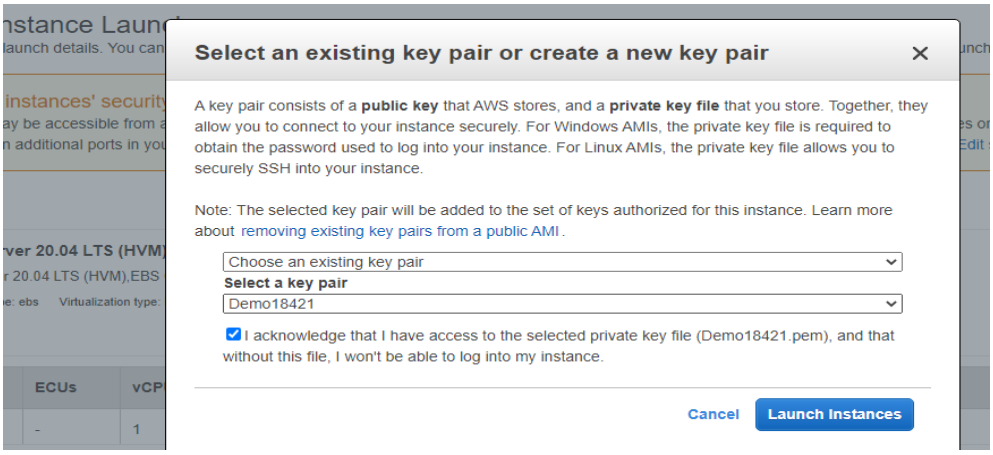
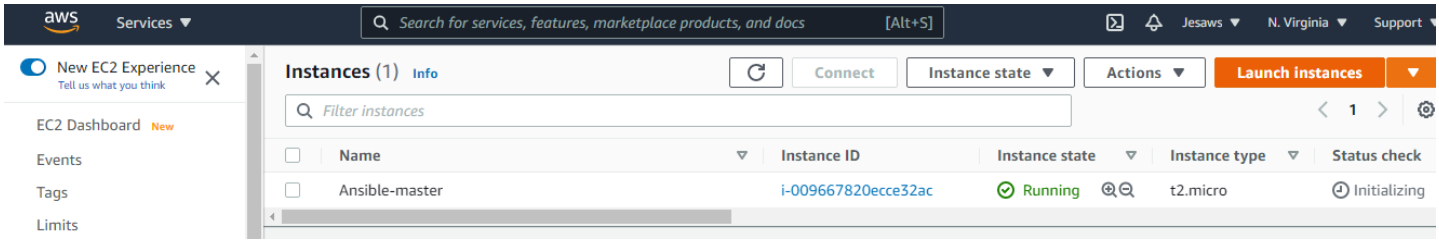
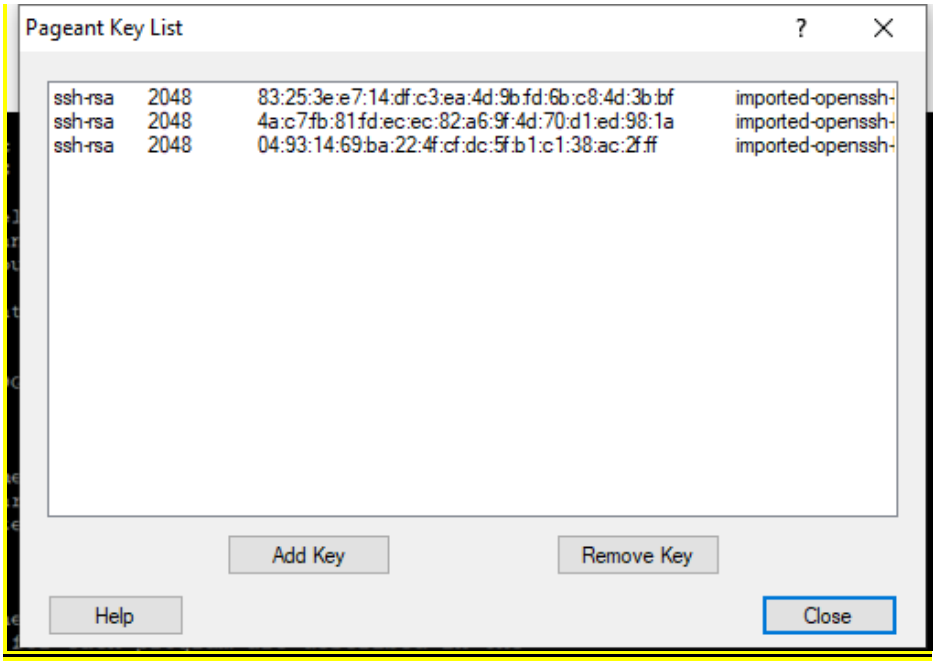
Step 6: Configure Security Group
sg-0f8bba7bfac2f12b8 launch-wizard-13 launch-wizard-13 created 2021-05-04T20:29:17.672+05:30 Copy to new
sg-06eab446241e7d71e launch-wizard-2 launch-wizard-2 created 2021-04-19T21:07:54.565+05:30 Copy to new
sg-0c71a4a67fc09c1da launch-wizard-3 launch-wizard-3 created 2021-04-19T21:10:33.006+05:30 Copy to new
sg-08861d303eaa6c7ac launch-wizard-4 launch-wizard-4 created 2021-04-21T22:37:54.737+05:30 Copy to new
sg-02de4330c5ff56f97 launch-wizard-5 launch-wizard-5 created 2021-04-22T20:19:04.790+05:30 Copy to new
sg-0f90bcbe6c41abe4a launch-wizard-6 launch-wizard-6 created 2021-04-23T19:59:21.634+05:30 Copy to new
sg-060d80ede618d85cd launch-wizard-7 launch-wizard-7 created 2021-04-23T20:00:20.016+05:30 Copy to new
sg-01f1cb4a9aa3a12bd launch-wizard-8 launch-wizard-8 created 2021-04-23T20:09:05.491+05:30 Copy to new
sg-0164378e8588b18c1 launch-wizard-9 launch-wizard-9 created 2021-04-25T12:38:37.295+05:30 Copy to new
Inbound rules for sg-0164378e8588b18c1 (Selected security groups: sg-0164378e8588b18c1)
Type
Protocol
Port Range
Source
Description
All TCP
TCP
0 - 65535
0.0.0.0/0

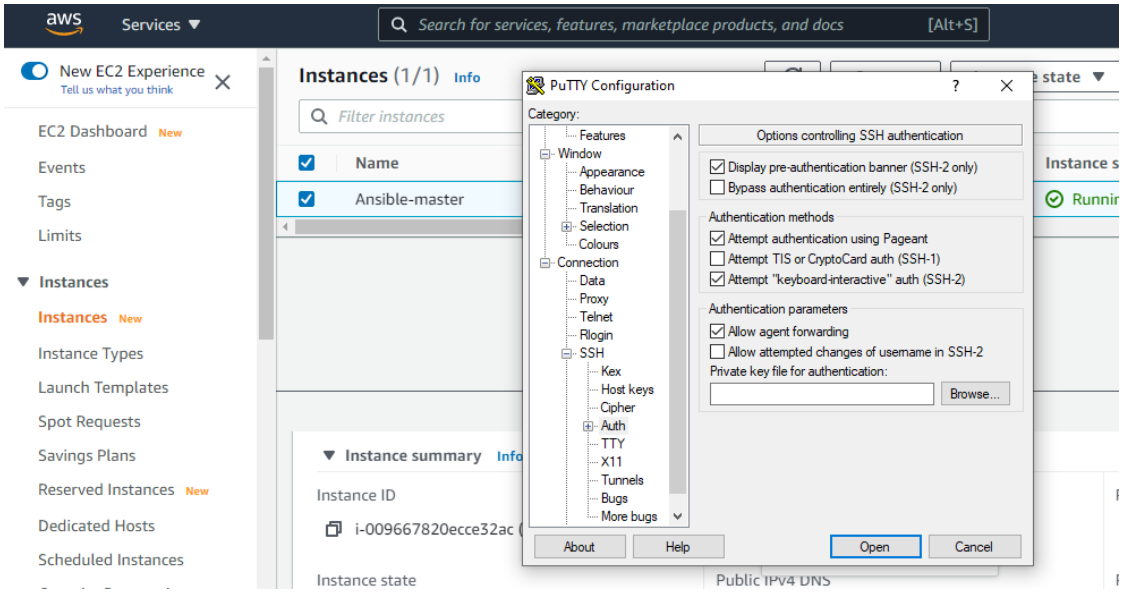

Select an existing key pair or create a new key pair
A key pair consists of a public key that AWS stores, and a private key file that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance.
Note: The selected key pair will be added to the set of keys authorized for this instance. Learn more about removing existing key pairs from a public AMI.
Choose an existing key pair
Select a key pair
Demo18421
I acknowledge that I have access to the selected private key file (Demo18421.pem), and that without this file, I won't be able to log into my instance.
Cancel
Launch Instances



Step 3: Download Pageagent and load your ppk file.



Using right click add the ppk file in the Pageagent:



Step 4: In putty ssh session enable allow agent forwarding option- Otherwise while connecting to node instance you will get permission denied error
Logon to ubuntu

```
login as: ubuntu
Authenticating with public key "imported-openssh-key" from agent
Welcome to Ubuntu 20.04.2 LTS (GNU/Linux 5.4.0-1045-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

  System information as of Sat May  8 16:16:08 UTC 2021

  System load:  0.0               Processes:             101
  Usage of /:   20.7% of 7.69GB   Users logged in:       0
  Memory usage: 26%               IPv4 address for eth0: 172.31.30.185
  Swap usage:   0%

16 updates can be applied immediately.
7 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable



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.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-172-31-30-185:~$
```

Step 5: Ansible adhoc command: Practice the command below with ubuntu user and not with root user

```
ubuntu@ip-172-31-30-185:~$ ansible --version
ansible 2.9.6
  config file = /etc/ansible/ansible.cfg
  configured module search path = ['/home/ubuntu/.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 = 3.8.5 (default, Jan 27 2021, 15:41:15) [GCC 9.3.0]
ubuntu@ip-172-31-30-185:~$
```

Step 6: Create one text file for e.g. slaves.txt and add node instance private IP

```
ubuntu@ip-172-31-30-185:~$ vi slaves.txt
ubuntu@ip-172-31-30-185:~$
```

```
ubuntu@ip-172-31-30-185: ~
172.31.53.168
~
~
```

Step 7: Default creation of ansible.cfg file and u can get it from

```
ubuntu@ip-172-31-30-185:/etc/ansible$ ls -lrta
total 32
-rw-r--r--  1 root root   982 Dec 18  2018 hosts
-rw-r--r--  1 root root 19985 Mar  5  2020 ansible.cfg
drwxr-xr-x 93 root root  4096 May  8 16:09 ..
drwxr-xr-x  2 root root  4096 May  8 16:09 .
ubuntu@ip-172-31-30-185:/etc/ansible$ vi hosts
ubuntu@ip-172-31-30-185:/etc/ansible$ vi ansible.cfg
ubuntu@ip-172-31-30-185:/etc/ansible$
```

Step 8: Vi ansible.cfg

ubuntu@ip-172-31-30-185:~$ vi ansible.cfg

```
# option lets you increase or decrease that
# timeout to something more suitable for the
# environment.
# gather_timeout = 10

# Ansible facts are available inside the ansible_facts.* dictionary
# namespace. This setting maintains the behaviour which was the default prior
# to 2.5, duplicating these variables into the main namespace, each with a
# prefix of 'ansible_'.
# This variable is set to True by default for backwards compatibility. It
# will be changed to a default of 'False' in a future release.
# ansible_facts.
# inject_facts_as_vars = True

# additional paths to search for roles in, colon separated
#roles_path    = /etc/ansible/roles

# uncomment this to disable SSH key host checking
host_key_checking = False

# change the default callback, you can only have one 'stdout' type  enabled at a time.
#stdout_callback = skippy
```

Step 9: ansible all -i slaves.txt -m ping

```
ubuntu@ip-172-31-30-185:~$ ansible all -i "slaves.txt" -m ping
172.31.53.168 | SUCCESS => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
    },
    "changed": false,
    "ping": "pong"
}
ubuntu@ip-172-31-30-185:~$
```