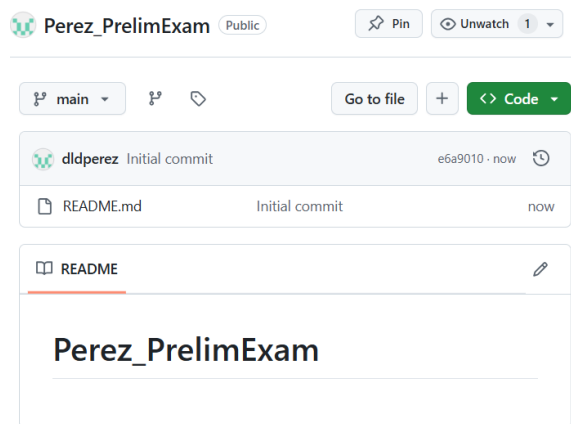


Tools Needed:

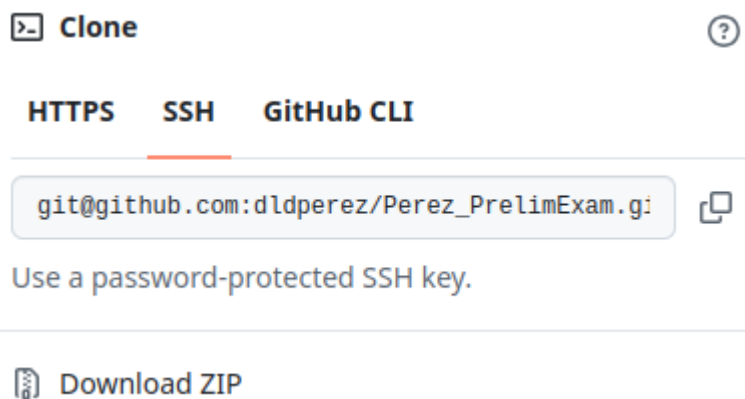
1. Control Node (CN) - 1
2. Manage Node (MN) - 2 Ubuntu

Procedure:

1. Note: You are required to create a document report of the steps you will do for this exam. All screenshots should be labeled and explained properly. LABELED AND EXPLAIN EACH CODE (PLAYBOOK) No explanation = Minus Points
2. Create a repository in your GitHub account and label it as Surname_PrelimExam



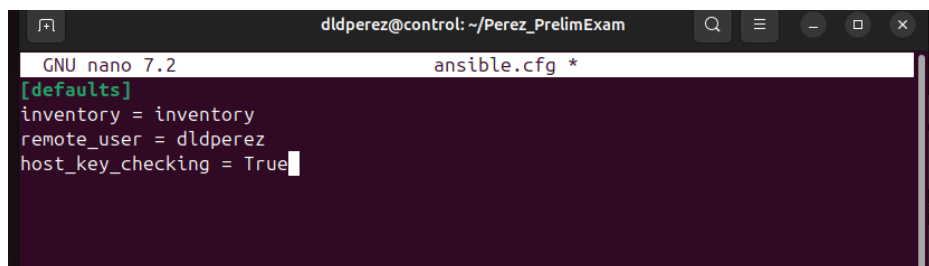
3. Clone your new repository in your CN.



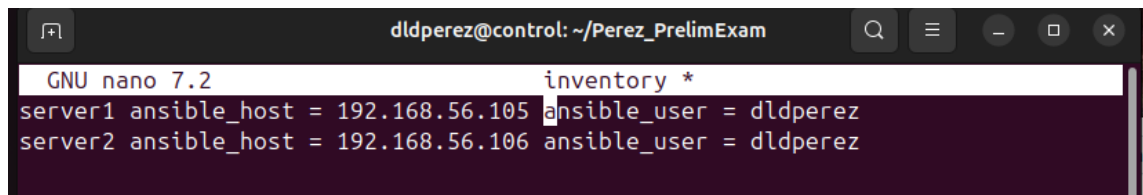
```
dldperez@control:~$ git clone git@github.com:dldperez/Perez_PrelimExam.g
Cloning into 'Perez_PrelimExam'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (3/3), done.
dldperez@control:~$ ls
Desktop    Downloads  Music      Pictures   snap       Videos
Documents  laboratory4 Perez_PrelimExam Public     Templates
```

4. In your CN, create an inventory file and ansible.cfg files.

```
dldperez@control:~/Perez_PrelimExam$ mkdir ansible.cfg
dldperez@control:~/Perez_PrelimExam$ ls
ansible.cfg  README.md
dldperez@control:~/Perez_PrelimExam$ mkdir inventory
dldperez@control:~/Perez_PrelimExam$ ls
ansible.cfg  inventory  README.md
dldperez@control:~/Perez_PrelimExam$
```

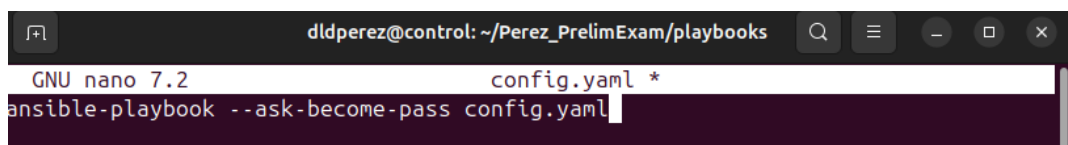


```
dldperez@control: ~/Perez_PrelimExam
GNU nano 7.2 ansible.cfg *
[defaults]
inventory = inventory
remote_user = dldperez
host_key_checking = True
```



```
dldperez@control: ~/Perez_PrelimExam
GNU nano 7.2 inventory *
server1 ansible_host = 192.168.56.105 ansible_user = dldperez
server2 ansible_host = 192.168.56.106 ansible_user = dldperez
```

5. Create an Ansible playbook that does the following with an input of a config.yaml file for both Manage Nodes



```
dldperez@control: ~/Perez_PrelimExam/playbooks
GNU nano 7.2 config.yaml *
ansible-playbook --ask-become-pass config.yaml
```

- Installs the latest python3 and pip3

```
dldperez@control:~/Perez_PrelimExam$ sudo apt install python3-pip
[sudo] password for dldperez:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  binutils binutils-common binutils-x86-64-linux-gnu build-essential bzip2
  dpkg-dev fakeroot g++ g++-13 g++-13-x86-64-linux-gnu g++-x86-64-linux-gnu
  gcc gcc-13 gcc-13-x86-64-linux-gnu gcc-x86-64-linux-gnu
```

```
dldperez@control:~/Perez_PrelimExam$ sudo apt install python3
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
python3 is already the newest version (3.12.3-0ubuntu2).
python3 set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 43 not upgraded.
```

```
dldperez@control:~/Perez_PrelimExam$ python3 --version
Python 3.12.3
dldperez@control:~/Perez_PrelimExam$ pip3 --version
pip 24.0 from /usr/lib/python3/dist-packages/pip (python 3.12)
dldperez@control:~/Perez_PrelimExam$
```

- use pip3 as default pip

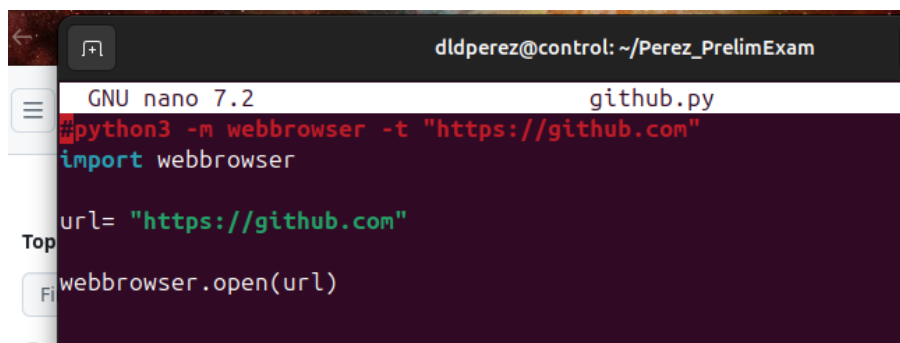
```
dldperez@control:~/Perez_PrelimExam$ echo "alias pip=/usr/lib/python3/dist-packages/pip"
alias pip=/usr/lib/python3/dist-packages/pip
dldperez@control:~/Perez_PrelimExam$
```

- use python3 as default python

```
dldperez@control:~/Perez_PrelimExam$ echo "alias python=/usr/bin/python3"
alias python=/usr/bin/python3
```

- Install Java open-jdk
- Create a Python Script named "github.py" that automatically opens github on Firefox (or any default web browser) USING ANSIBLE.

SCRIPT

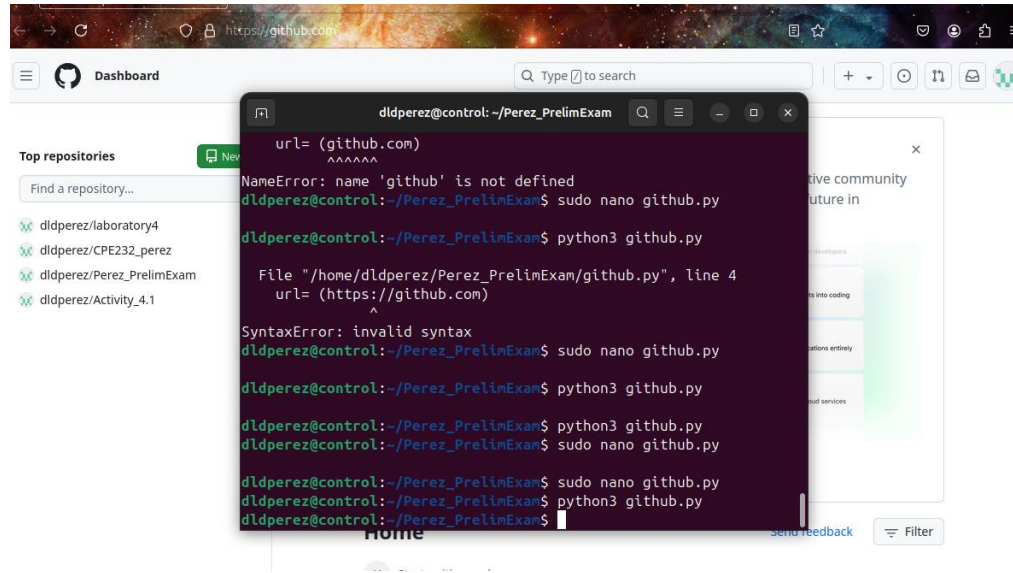


```
GNU nano 7.2 github.py
python3 -m webbrowser -t "https://github.com"
import webbrowser

url = "https://github.com"

webbrowser.open(url)
```

PROOF



The screenshot shows a terminal window with the following commands and output:

```
dldperez@control: ~/Perez_PrelimExam
url= (github.com)
^^^^^^
NameError: name 'github' is not defined
dldperez@control:~/Perez_PrelimExam$ sudo nano github.py
dldperez@control:~/Perez_PrelimExam$ python3 github.py
File "/home/dldperez/Perez_PrelimExam/github.py", line 4
url= (https://github.com)
^
SyntaxError: invalid syntax
dldperez@control:~/Perez_PrelimExam$ sudo nano github.py
dldperez@control:~/Perez_PrelimExam$ python3 github.py
dldperez@control:~/Perez_PrelimExam$ python3 github.py
dldperez@control:~/Perez_PrelimExam$ sudo nano github.py
dldperez@control:~/Perez_PrelimExam$ python3 github.py
dldperez@control:~/Perez_PrelimExam$
```

The background shows the GitHub dashboard with the repository 'dldperez/Perez_PrelimExam' selected.

- Create Motd containing the text defined by a variable defined in config.yaml file and if there is no variable input the default motd is "Ansible Managed node by (your user name)"
- Create a user with a variable defined in config.yaml

5. PUSH and COMMIT your PrelimExam in your GitHub repo

6. Screenshot / document your work. Add PROOF that all your CODES / SCRIPTS WORK.

7. Your document report should be submitted here. Your document SHOULD BE explained neatly and comprehensively.

8. For your prelim exam to be counted, please paste your repository link here. (Failure to submit will result in ZERO)

https://github.com/dldperez/Perez_PrelimExam.git

9. NO USE OF EXTERNAL WEBSITES SUCH AS REDDIT, FORUMS, GITHUB, CHATGPT, CLAUDEAI, BARD, AND DOCUMENTATIONS. FAILURE TO COMPLY WITH RESULT IN ZERO.