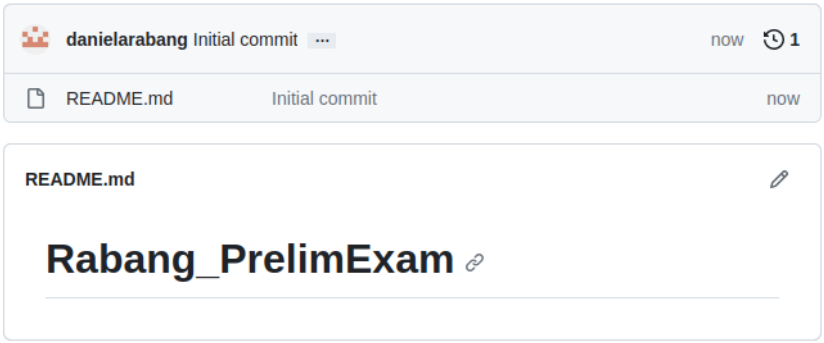
Name: Daniela Marie D. Rabang	**Date:** Sep 25, 2023
Section: CPE31S4	**Instructor:** Dr. Jonathan V. Taylar

Prelim Skills Exam

Tools Needed:
Control Node (CN) - 1
Manage Node (MN) - 1 Ubuntu
Manage Node (MN) - 1 CentOS

Procedure:
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.

1. **Create a repository in your GitHub account and label it as Surname_PrelimExam**



Explanation: I had created a repository from my github account that is named as Rabang_PrelimExam.

2. **Clone your new repository in your CN.**

```
daniela@workstation:~$ git clone git@github.com:danielarabang/Rabang_PrelimExam.git
Cloning into 'Rabang_PrelimExam'...
Warning: Permanently added the ECDSA host key for IP address '192.30.255.113' to the list of known hosts.
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (3/3), done.
daniela@workstation:~$ ls
ansibleS4           Desktop    examples.desktop      inventory  Pictures           Templates
CPE232_Rabang       Documents  install_apache.retry  key.txt    Public             Videos
CPE232_Rabang_HOA5  Downloads  install_apache.yml    Music      Rabang_PrelimExam
```

Explanation: Then I had cloned the repository to the control node which is the workstation.

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

command	`daniela@workstation:~/Rabang_PrelimExam$ sudo nano inventory`
file	GNU nano 2.9.3 inventory 192.168.56.110 ansible_python_interpreter=/usr/bin/python3 192.168.56.112 ansible_python_interpreter=/usr/bin/python

Explanation: I had created and modified the content of the inventory file.

command	
file	GNU nano 2.9.3 ansible.cfg [defaults] inventory = inventory host_key checking = False deprecation_warning = False remote_user = daniela private_key_file = ~/.ssh/

Explanation: I had created and modified the content of the ansible.cfg file.

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

- **Installs the latest python3 and pip3**

Playbook	GNU nano 2.9.3 config.yaml --- - hosts: all become: true tasks: - name: install python3 in Ubuntu apt: name: python3 when: ansible_distribution == "Ubuntu" - name: install python3 in CentOS yum: name: python3 when: ansible_distribution == "CentOS"
Successful run	daniela@workstation:~/Rabang_PrelimExam$ ansible-playbook --ask-become-pass config.yaml SUDO password: PLAY [all] *********** ********** TASK [Gathering Facts] *********** ********** ok: [192.168.56.110] ok: [192.168.56.112] TASK [install python3 in Ubuntu] *********** ********** skipping: [192.168.56.112] ok: [192.168.56.110] TASK [install python3 in CentOS] *********** ********** skipping: [192.168.56.110] changed: [192.168.56.112] PLAY RECAP *********** ********** 192.168.56.110 : ok=2 changed=0 unreachable=0 failed=0 192.168.56.112 : ok=2 changed=1 unreachable=0 failed=0
Evidences	daniela@server1:~$ python3 -V Python 3.6.9

	[daniela@localhost ~]$ python3 -V Python 3.6.8

Explanation: I had issued the commands to the playbook that can install the python3 from the two manage node.

- **use pip3 as default pip**

Playbook	GNU nano 2.9.3 config.yaml Modified --- - hosts: all become: true tasks: - name: install python3 in Ubuntu apt: name: python3 when: ansible_distribution == "Ubuntu" - name: install python3 in CentOS yum: name: python3 when: ansible_distribution == "CentOS" - name: install pip3 in Ubuntu apt: name=python3-pip state=present when: ansible_distribution == "Ubuntu" - name: install pip in CentOS apt: name=python-pip state=present when: ansible_distribution == "CentOS"
Successful run	daniela@workstation:~/Rabang_PrelimExam$ ansible-playbook --ask-become-pass config.yaml SUDO password: PLAY [all] *** TASK [Gathering Facts] *** ok: [192.168.56.112] ok: [192.168.56.110] TASK [install python3 in Ubuntu] *** skipping: [192.168.56.112] ok: [192.168.56.110] TASK [install python3 in CentOS] *** skipping: [192.168.56.110] ok: [192.168.56.112] TASK [install pip3 in Ubuntu] *** skipping: [192.168.56.112] ok: [192.168.56.110] TASK [install pip in CentOS] *** skipping: [192.168.56.110] fatal: [192.168.56.112]: FAILED! => {"changed": false, "cmd": "apt-get update", "msg": "[Errno 2] No such file or directory", "rc": 2} to retry, use: --limit @/home/daniela/Rabang_PrelimExam/config.retry PLAY RECAP *** 192.168.56.110 : ok=3 changed=0 unreachable=0 failed=0 192.168.56.112 : ok=2 changed=0 unreachable=0 failed=1

Evidences	daniela@server1:~$ pip3 -V pip 9.0.1 from /usr/lib/python3/dist-packages (python 3.6)

Explanation: I had issued the commands to the playbook that can install the pip3 and pip from the two manage node.

- **use python3 as default python**

Playbook	
Successful run	
Evidences	

- **Install Java open-jdk**
- **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**

```
daniela@workstation:~/Rabang_PrelimExam$ git add *
daniela@workstation:~/Rabang_PrelimExam$ git commit -m "Final"
[main 929a3cf] Final
 1 file changed, 9 insertions(+)
daniela@workstation:~/Rabang_PrelimExam$ git push origin main
Counting objects: 3, done.
Delta compression using up to 2 threads.
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 422 bytes | 422.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To github.com:danielarabang/Rabang_PrelimExam.git
   704b1ab..929a3cf  main -> main
```

6. **Your document report should be submitted here.**
7. **For your prelim exam to be counted, please paste your repository link here.**
   https://github.com/danielarabang/Rabang_PrelimExam.git