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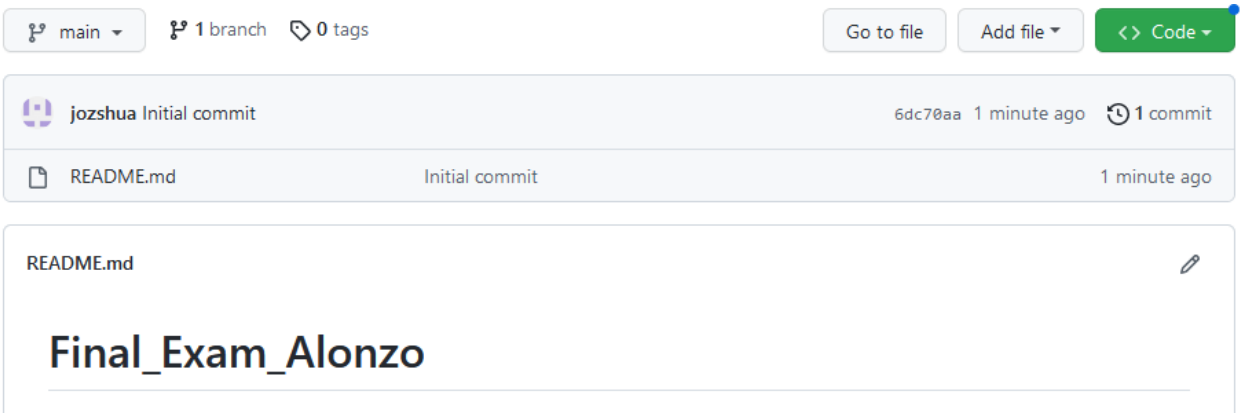
CPE31S23	December 15, 2022

Create a repository and label it as "Final_Exam_Surname"



Clone your new repository in your VM

```
jozshua@jozshua-VirtualBox:~$ git clone git@github.com:jozshua/Final_Exam_Alonzo
.git
Cloning into 'Final_Exam_Alonzo'...
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.
jozshua@jozshua-VirtualBox:~$
```

```
jozshua@jozshua-VirtualBox:~$ ls
Alonzo_PrelimExam   Desktop           get-pip.py    Music      Templates
cpe_ansible_Act6    Documents         HOA10_Alonzo  Pictures   Videos
cpe_ansible_Alonzo  Downloads         HOA8_Alonzo   Public
CPE_MIDEXAM_ALONZO  Final_Exam_Alonzo HOA9_Alonzo   snap
jozshua@jozshua-VirtualBox:~$
```

Create an Ansible playbook that does the following with an input of a config.yaml file and structure inventory file.
3.1 Install and configure one enterprise service that can be installed in Debian and Centos servers

3.2 Install and configure one monitoring tool that can be installed in Debian and Centos servers (if it is a stack there should be option of different host)

4.4 Change Motd as "Ansible Managed by <username>"

4. Push and commit your files in GitHub

5. Make sure to show evidence of input (codes) process (codes successfully running) and output (evidence of installation). Create a word document report for this final exam. For your final exam to be counted, please paste your repository link as an answer in your report. No point will be given if you forgot to paste your repo link.

```
  GNU nano 6.2                          inventory *
[remoteservers]

192.168.56.112
192.168.56.116
```

```
  GNU nano 6.2                          config.yaml *
---

- hosts: all
  become: true
  tasks:

  - name: Installation of Nagios in Ubuntu
    apt:
      name:
        - nagios4
      state: latest
      update_cache: yes
    when: ansible_distribution == "Ubuntu"

  - name: Installation of Nagios in CentOS
    dnf:
      name:
        - nagios
      state: latest
      update_cache: yes
    when: ansible_distribution == "CentOS"
```

```
- hosts: all
  become: true
  tasks:

  - name: Banner motd (Ubuntu)
    debug:
      msg: "Ansible Managed by Alonzo"
    when: ansible_distribution == "Ubuntu"

  - name: Banner motd (CentOS)
    debug:
      msg: "Ansible Managed by Alonzo"
    when: ansible_distribution == "CentOS"
```

Created these inventory and config.yaml files for ansible playbook.

```
jozshua@jozshua-VirtualBox:~/Final_Exam_Alonzo/cpe_FE$ ansible all -m ping
192.168.56.112 | SUCCESS => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
    },
    "changed": false,
    "ping": "pong"
}
192.168.56.116 | SUCCESS => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python"
    },
    "changed": false,
    "ping": "pong"
}
```

```
jozshua@jozshua-VirtualBox:~/Final_Exam_Alonzo/cpe_FE$ ansible-playbook --ask-b
ecome-pass config.yaml
BECOME password:

PLAY [all] *********************************************************************
*

TASK [Gathering Facts] *********************************************************
*
ok: [192.168.56.112]
ok: [192.168.56.116]

TASK [Installation of Nagios (Ubuntu)] *****************************************
*
skipping: [192.168.56.116]
ok: [192.168.56.112]

TASK [Installation of Nagios (CentOS)] *****************************************
*
skipping: [192.168.56.112]
ok: [192.168.56.116]
```

```
PLAY [all] *********************************************************************
*

TASK [Gathering Facts] *********************************************************
*
ok: [192.168.56.112]
ok: [192.168.56.116]

TASK [Banner motd (Ubuntu)] ****************************************************
*
skipping: [192.168.56.116]
ok: [192.168.56.112] => {
    "msg": "Ansible Managed by Alonzo"
}

TASK [Banner motd (CentOS)] ****************************************************
*
skipping: [192.168.56.112]
ok: [192.168.56.116] => {
    "msg": "Ansible Managed by Alonzo"
}

PLAY RECAP *********************************************************************
*
192.168.56.112             : ok=4    changed=0    unreachable=0    failed=0
skipped=2    rescued=0    ignored=0
192.168.56.116             : ok=4    changed=0    unreachable=0    failed=0
skipped=2    rescued=0    ignored=0
```

There are a total of 8 successfully executed tasks for installation of Nagios for both servers.

Proof of installations:

For Ubuntu:

```
jozshua@Server1-VirtualBox:~$ nagios4 -- version

Nagios Core 4.4.6
Copyright (c) 2009-present Nagios Core Development Team and Community Contribut
ors
Copyright (c) 1999-2009 Ethan Galstad
Last Modified: 2020-04-28
License: GPL
```

For CentOS:

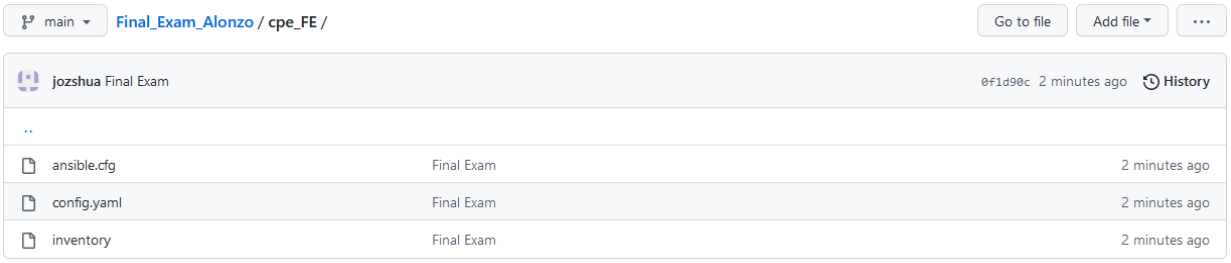
```
[jozshua@localhost ~]$ nagios --version

Nagios Core 4.4.6
Copyright (c) 2009-present Nagios Core Development Team and Community Contributors
Copyright (c) 1999-2009 Ethan Galstad
Last Modified: 2020-04-28
License: GPL
```

```
jozshua@jozshua-VirtualBox:~/Final_Exam_Alonzo$ git add cpe_FE
jozshua@jozshua-VirtualBox:~/Final_Exam_Alonzo$ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   cpe_FE/ansible.cfg
        new file:   cpe_FE/config.yaml
        new file:   cpe_FE/inventory

jozshua@jozshua-VirtualBox:~/Final_Exam_Alonzo$ git commit -m "Final Exam"
[main 0f1d90c] Final Exam
 3 files changed, 48 insertions(+)
 create mode 100644 cpe_FE/ansible.cfg
 create mode 100644 cpe_FE/config.yaml
 create mode 100644 cpe_FE/inventory
jozshua@jozshua-VirtualBox:~/Final_Exam_Alonzo$ git push -u origin main
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Compressing objects: 100% (5/5), done.
Writing objects: 100% (6/6), 790 bytes | 790.00 KiB/s, done.
Total 6 (delta 0), reused 0 (delta 0), pack-reused 0
To github.com:jozshua/Final_Exam_Alonzo.git
   6dc70aa..0f1d90c  main -> main
Branch 'main' set up to track remote branch 'main' from 'origin'.
```



Pushed and committed to github repository.

Github link:
https://github.com/jozshua/Final_Exam_Alonzo.git