CPE 212 - Prelim Exam	
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CPE31S4	Engr. Robin Valenzuela

NEEDS:
- 1 Control Node (ubuntu)
- 2 Manage Nodes (ubuntu)

INSTRUCTIONS:
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.
4. In your CN, create an inventory file and ansible.cfg files.
5. Create an Ansible playbook that does the following with an input of a config.yaml file for both Manage Nodes
   a. Installs the latest python3 and pip3
   b. use pip3 as default pip
   c. use python3 as default python
   d. Install Java open-jdk
   e. Install MariaDB as well as starting the server, create a database and a table using mariaDB and input one record into a table USING ANSIBLE ONLY
   f. 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)"
   g. Create a user with a variable defined in config.yaml
6. PUSH and COMMIT your PrelimExam in your GitHub repo
7. Your document report should be submitted here.
8. For your prelim exam to be counted, please paste your repository link here. (Failure to submit will result in ZERO)
9. NO USE OF EXTERNAL WEBSITES SUCH AS , REDDIT, CHATGPT, GITHUB, GEMINI, CLAUDE, FORUMS, AND DOCUMENTATIONS. FAILURE TO COMPLY WITH RESULT IN ZERO.

TL;DR - REPO:
https://github.com/Alexis-acad/Deniega_PrelimExam

INSTRUCTIONS:


```
programmymain@workstation:~$ git clone git@github.com:Alexis-acad/Deniega_Prelim
Exam
Cloning into 'Deniega_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.
programmymain@workstation:~$
```

```
programmymain@workstation:~/Deniega_PrelimExam$ nano inventory.ini
programmymain@workstation:~/Deniega_PrelimExam$ nano config.yaml
programmymain@workstation:~/Deniega_PrelimExam$ cd
```

```
tasks:
  - name: install the latest python3 and pip3 (ubuntu)
    apt:
      name:
        - python3
        - python3-pip
      state: latest
      update_cache: yes
    when: ansible_distribution == "Ubuntu"
  - name: install the latest python3 and pip3 (debian)
    dnf:
      name:
        - python3
        - python3-pip
      state: latest
      update_cache: yes
    when: ansible_distribution == "Debian"
```

This one installs the python3 and pip3 packages, with different versions for different systems. It's also put on the latest package.

```
TASK [install the latest python3 and pip3 (ubuntu)] ********************
ok: [192.168.56.117]
ok: [192.168.56.116]

TASK [install the latest python3 and pip3 (debian)] ********************
skipping: [192.168.56.116]
skipping: [192.168.56.117]
```

```
  - name: install java's Open-JDK in Ubuntu
    apt:
      name:
        - openjdk-8-jdk
      update_cache: yes
    when: ansible_distribution == "Ubuntu"
  - name: install java's Open-JDK in Debian
    dnf:
      name:
        - openjdk-8-jdk
      update_cache: yes
    when: ansible_distribution == "Debian"
```

Same thing as python but it's JDK.

```
TASK [install java's Open-JDK in Ubuntu] *********
ok: [192.168.56.117]
ok: [192.168.56.116]

TASK [install java's Open-JDK in Debian] *********
skipping: [192.168.56.116]
skipping: [192.168.56.117]
```

```yaml
  - name: install mariadb on ubuntu
    apt:
      name:
        - mariadb-server
      state: latest
      update_cache: yes
    when: ansible_distribution == "Ubuntu"
  - name: install mariadb on debian
    dnf:
      name:
        - mariadb-server
      state: latest
      update_cache: yes
    when: ansible_distribution == "Debian"
```

Again, the same thing here as the first two packages. Latest version, update cache is on true.

```yaml
  - name: enable mariadb
    ansible.builtin.systemd:
      name: mariadb
      enabled: yes
    when: ansible_distribution in ["Debian", "Ubuntu"]
```

Systemd is a built in thing here to enable servers and stuff. It's the same for both distros.

```
TASK [install mariadb on ubuntu] ************************************************
fatal: [192.168.56.117]: FAILED! => {"msg": "Timeout (12s) waiting for privilege escalation prompt: "}
ok: [192.168.56.116]

TASK [install mariadb on debian] ************************************************
skipping: [192.168.56.116]

TASK [enable mariadb] ************************************************
ok: [192.168.56.116]
```

THIS GODFORSAKEN TIMEOUT HAS BEEN BUGGING ME FOR THE THREE HOURS I'VE BEEN DOING THIS

```yaml
  - name: create database in mariadb
    community.mysql.mysql_db:
        name: "Test"
        create:
          name: "Test"
          if_not_exists: yes
```

```
  tr_not_exists: yes
- name: message of the day
  netapp.ontap.na_ontap_motd:
    motd_msg: "Ansible Managed Node by programmy-main"
    hostname: programmy-main
    vserver: managenode
```

I don't even know what am I doing here man.

I didn't do the user one. I gave up.

```
nothing to commit, working tree clean
programmymain@workstation:~/Deniega_PrelimExam$ git add README.md ansible.cfg config.yaml inventory.ini
programmymain@workstation:~/Deniega_PrelimExam$ git commit -m "I don't know"
On branch main
Your branch is ahead of 'origin/main' by 3 commits.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean
programmymain@workstation:~/Deniega_PrelimExam$ git push origin main
Enumerating objects: 13, done.
Counting objects: 100% (13/13), done.
Delta compression using up to 2 threads
Compressing objects: 100% (8/8), done.
Writing objects: 100% (9/9), 918 bytes | 918.00 KiB/s, done.
Total 9 (delta 3), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (3/3), completed with 1 local object.
To github.com:Alexis-acad/Deniega_PrelimExam
   507e3bb..8b8d04d  main -> main
programmymain@workstation:~/Deniega_PrelimExam$
```

Deniega_PrelimExam Public

main ⌕ ⌖

Go to file + <> Code ▾

Alexis-acad I don't know   8b8d04d · 1 minute ago ⟳

🗋 README.md	I don't know	1 minute ago
🗋 ansible.cfg	I give up. I can't do this.	3 minutes ago
🗋 config.yaml	I don't know	1 minute ago
🗋 inventory.ini	I don't know	1 minute ago

📖 README   ✏ ☰

Deniega_PrelimExam

I give up.

uhhhh