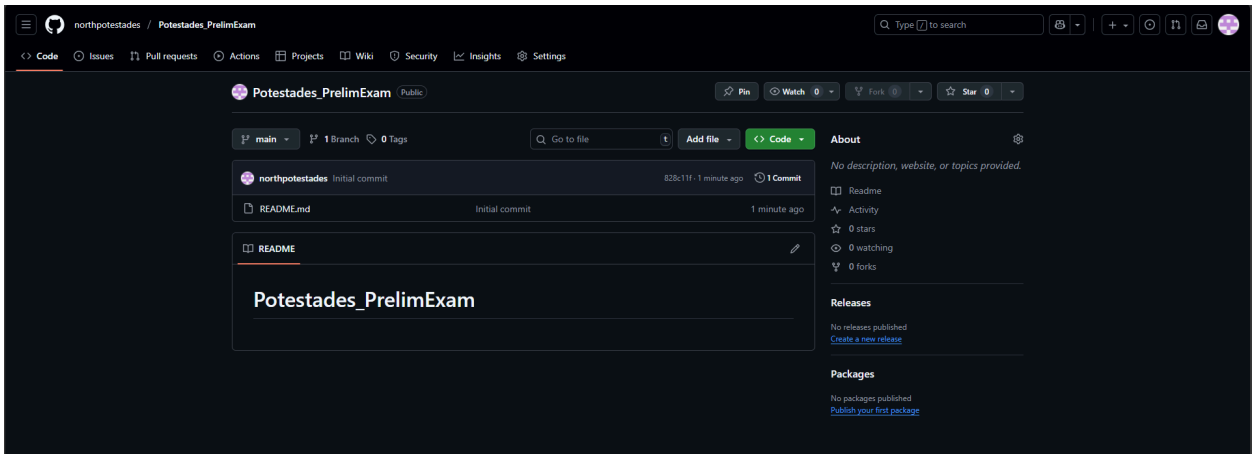
Name: Potestades, North Nygel G.	**Date Performed:** 8/29/25
Course/Section: CPE31S2	**Date Submitted:** 8/29/25
Instructor: Engr. Robin Valenzuela	**Semester and SY:** 1st Semester 2025-2026
Hands-on Prelim Exam	

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.

```
north@workstation:~$ git clone git@github.com:northpotestades/Potestades_Prelim
Exam.git
Cloning into 'Potestades_PrelimExam'...
```

I used the git clone command to clone the new repository to my control node.

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

```
  GNU nano 2.9.3                    ansible.cfg

[defaults]
inventory= inventory.yaml
private_key_file= ~/.ssh/ansible
ansible_python_interpreter= /usr/bin/python3
```

```
  GNU nano 2.9.3                    inventory.yaml

[dbserver]
192.168.56.105
192.168.56.106
192.168.56.107
[ubuntu]
192.168.56.105
192.168.56.106
[centos]
192.168.56.107
```

```
north@workstation:~/Potestades_PrelimExam$ ls
ansible.cfg  inventory.yaml  README.md
```

I created an inventory.yaml and ansible.cfg file on my control node using nano, using the settings detailed in previous procedures.

5. 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
    - use pip3 as default pip
    - use python3 as default python
    - Install Java open-jdk
    - 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
    - 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

```
north@workstation:~/Potestades_PrelimExam$ ansible-playbook --ask-become-pass c
onfig.yaml
SUDO password:

PLAY [ubuntu] ******************************************************************
*

TASK [Gathering Facts] *********************************************************
*
ok: [192.168.56.105]
ok: [192.168.56.106]

TASK [Install python3] *********************************************************
*
ok: [192.168.56.105]
ok: [192.168.56.106]

TASK [Install pip3] ************************************************************
*
changed: [192.168.56.106]
changed: [192.168.56.105]

TASK [Set pip3 as default pip] *************************************************
*
changed: [192.168.56.106]
changed: [192.168.56.105]

TASK [Set python3 as default python] *******************************************
*
ok: [192.168.56.106]
ok: [192.168.56.105]

TASK [Install Java open-jdk] ***************************************************
*
changed: [192.168.56.105]
changed: [192.168.56.106]

TASK [Install MariaDB] *********************************************************
*
changed: [192.168.56.105]
changed: [192.168.56.106]

TASK [Start MariaDB] ***********************************************************
*
ok: [192.168.56.106]
ok: [192.168.56.105]

TASK [Create a user] ***********************************************************
*
changed: [192.168.56.105]
changed: [192.168.56.106]

PLAY RECAP *********************************************************************
*
192.168.56.105             : ok=9    changed=5    unreachable=0    failed=0
192.168.56.106             : ok=9    changed=5    unreachable=0    failed=0
```

As can be seen in the output above, I was able to successfully perform the bulleted points other than creating an MOTD and creating a database, a table, and inserting a record into a MariaDB table.

5. PUSH and COMMIT your PrelimExam in your GitHub repo

```
north@workstation:~/Potestades_PrelimExam$ git add ansible.cfg
north@workstation:~/Potestades_PrelimExam$ git add config.yaml
north@workstation:~/Potestades_PrelimExam$ git commit -m "update 4"
[main 8c2ed37] update 4
 2 files changed, 40 insertions(+), 15 deletions(-)
north@workstation:~/Potestades_PrelimExam$ git push origin main
Counting objects: 4, done.
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 1.01 KiB | 1.01 MiB/s, done.
Total 4 (delta 0), reused 0 (delta 0)
To github.com:northpotestades/Potestades_PrelimExam.git
   577c967..8c2ed37  main -> main
```

I used first the command git add before to add the specified files to the staging area, then git commit -m “update 4” to create a new commit with the given message, as this was my 4th update. Lastly, I used git push origin main to push the new git commit to the servers to update the files.

Proof: