Hands-on Prelim Exam	
CPE 232-CPE31S23 - Managing Enterprise Servers	
Course Code: CPE232	**Program: BSCPE**
Course Title: Managing Enterprise Servers	**Date Performed: September 22, 2022**
Section: CPE31S23	**Date Submitted: September 22, 2022**
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Tools Needed:

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

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

SCREENSHOT #1:

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere?
Import a repository.

Owner * Repository name *

qgsoriano1 / Soriano_PrelimExam

Great repository names are short and memorable. Need inspiration? How about cautious-telegram?

Description (optional)

Public
Anyone on the internet can see this repository. You choose who can commit.

Private
You choose who can see and commit to this repository.

Initialize this repository with:

Skip this step if you're importing an existing repository.

Add a README file
This is where you can write a long description for your project. Learn more.

Add .gitignore

Choose which files not to track from a list of templates. Learn more.

.gitignore template: None

Choose a license

A license tells others what they can and can't do with your code. Learn more.

License: None

This will set `main` as the default branch. Change the default name in your settings.

You are creating a public repository in your personal account.

Create repository

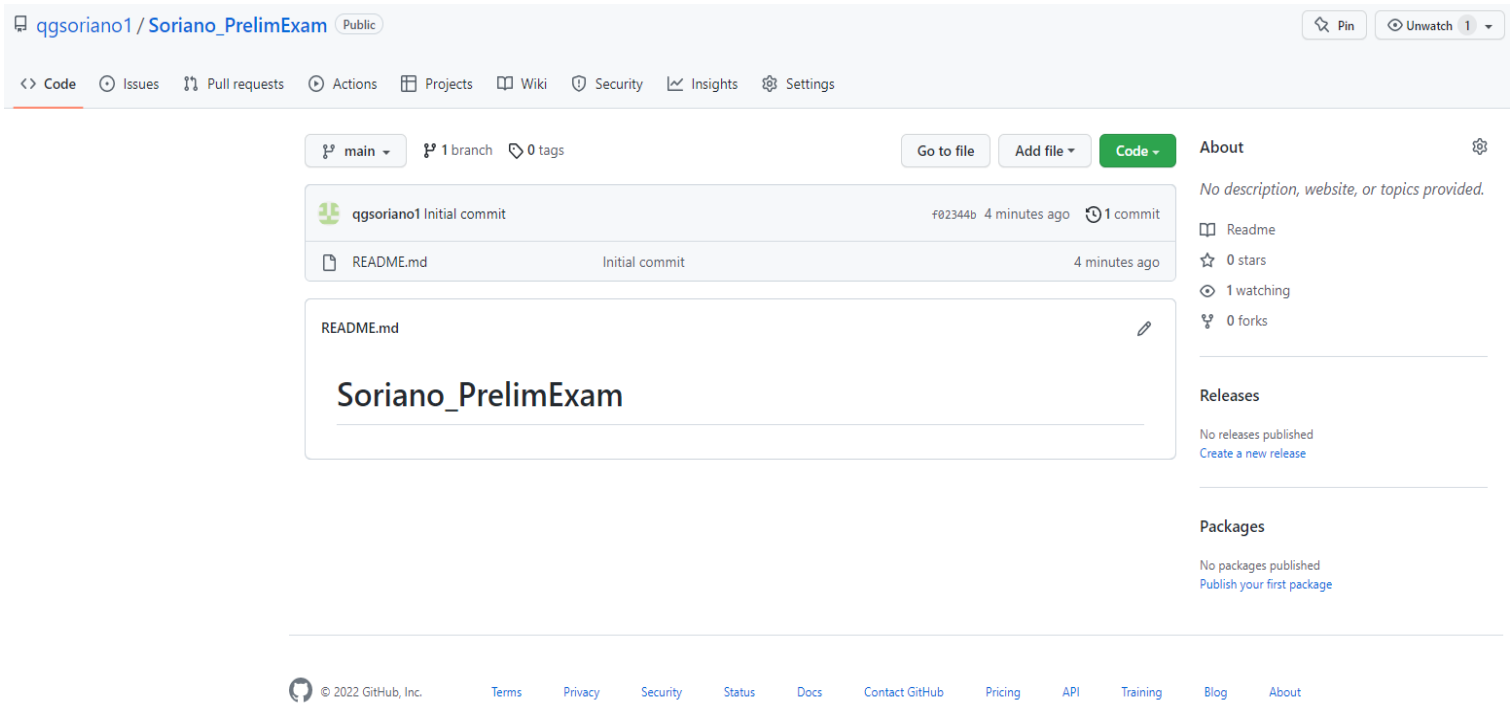
- **This shows the procedure on how to start/create a new repository in the github.com, the link of the repository is pasted below:**

  HTTPS - https://github.com/qgsoriano1/Soriano_PrelimExam.git

  SSH - git@github.com:qgsoriano1/Soriano_PrelimExam.git

  GitHub CLI - gh repo clone qgsoriano1/Soriano_PrelimExam

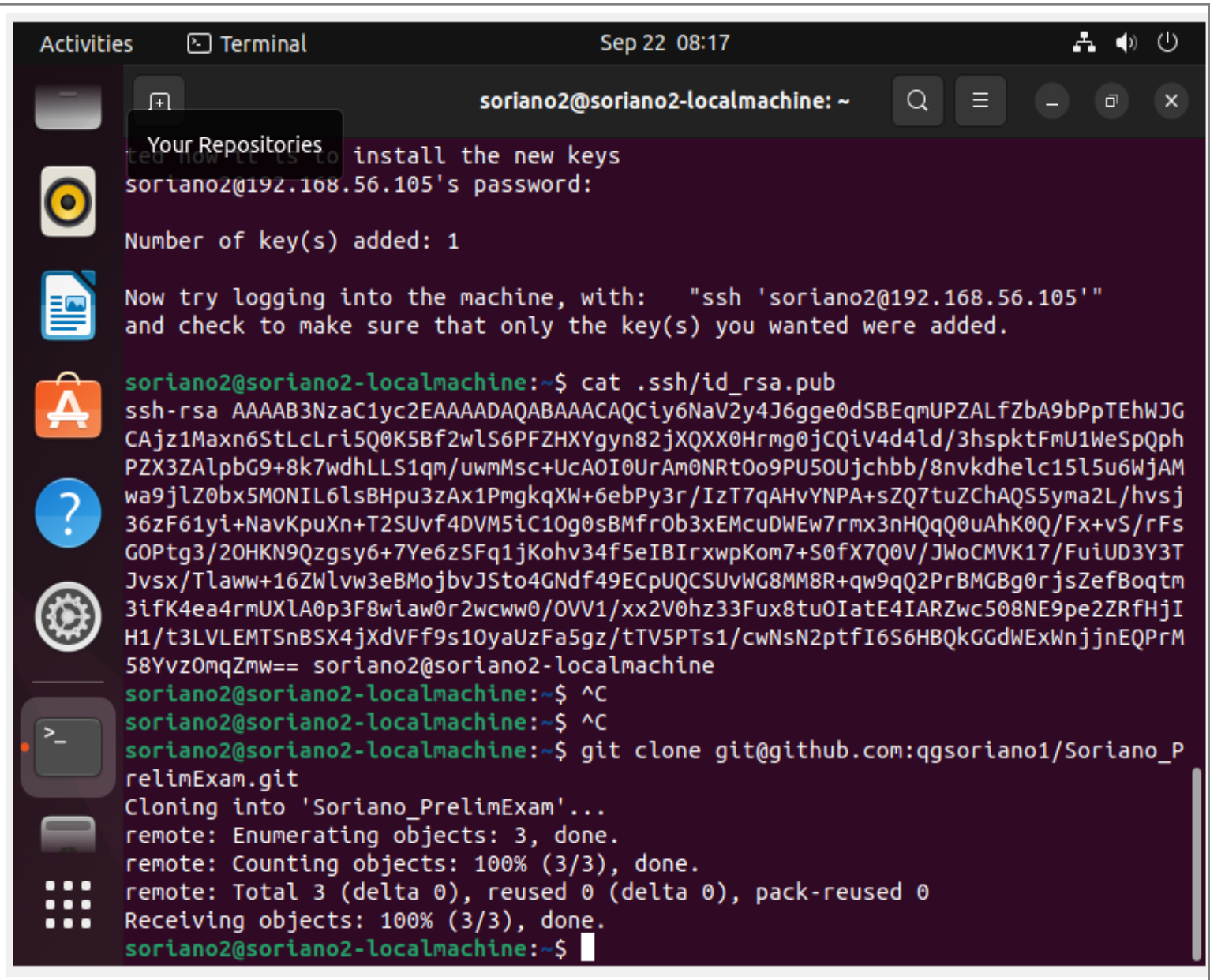
SCREENSHOT #2:



- **This shows the created repository in GitHub, named "Soriano_PrelimExam", as seen above.**

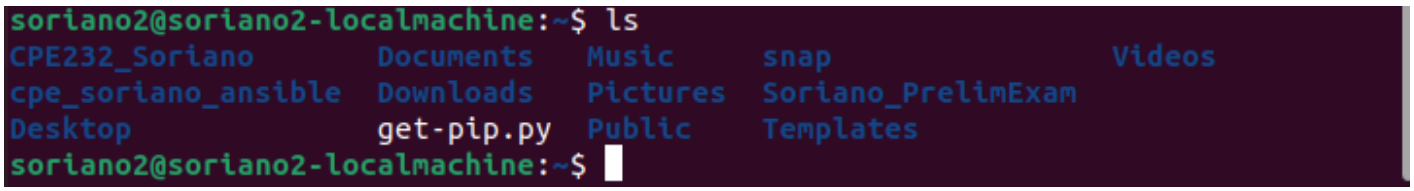
3. Clone your new repository in your CN.

SCREENSHOT #3:

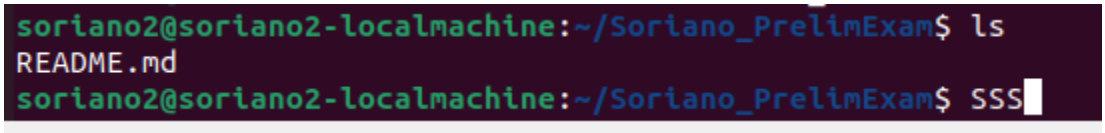


- **This shows that the repository "Soriano_PrelimExam" from GitHub, has been successfully cloned in the Control node, which is the Virtual Machine named "soriano2".**

SCREENSHOT #4:



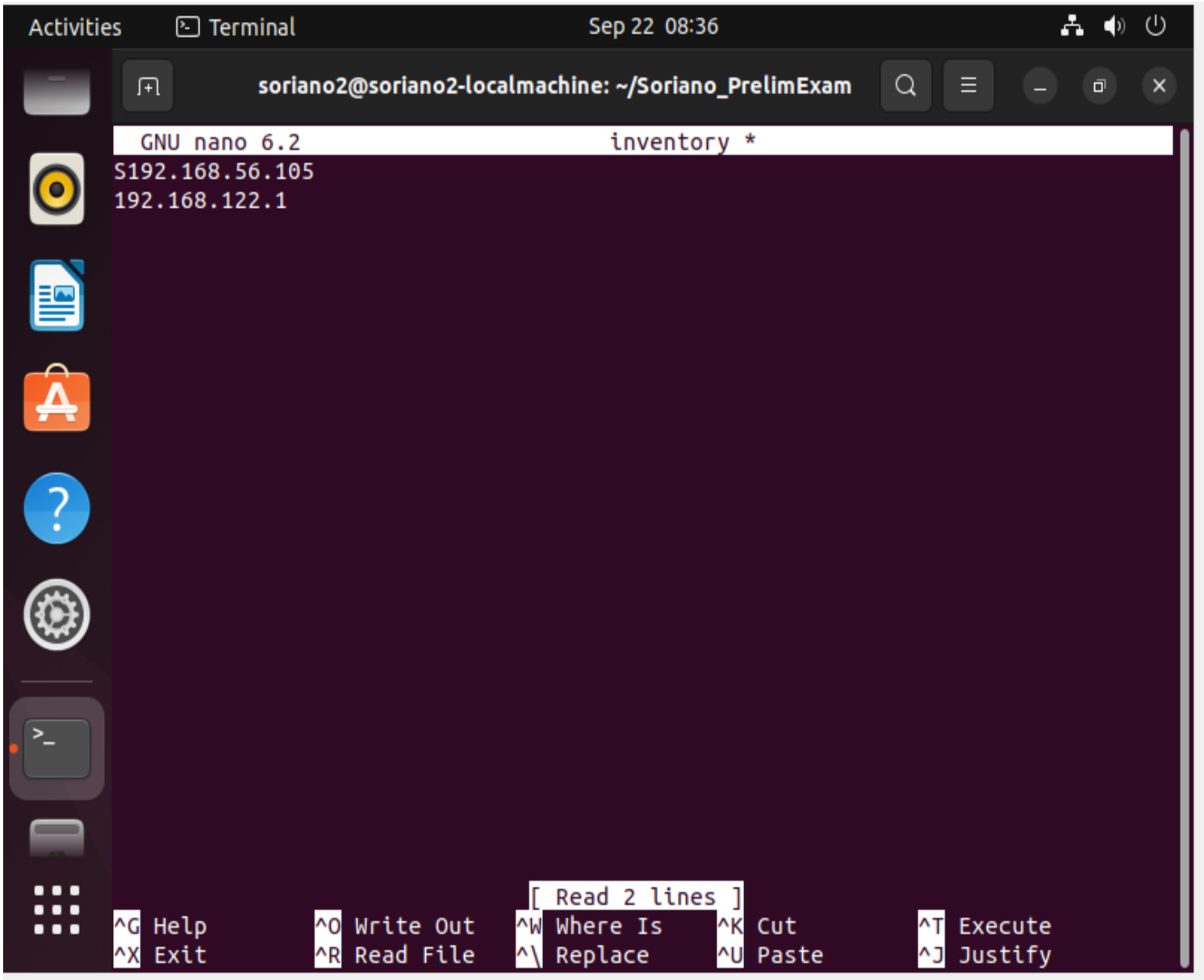
SCREENSHOT #5:



- **These screenshots show that the repository is successfully cloned, as seen above, the directory "Soriano_PrelimExam" is visible and also accessible.**

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

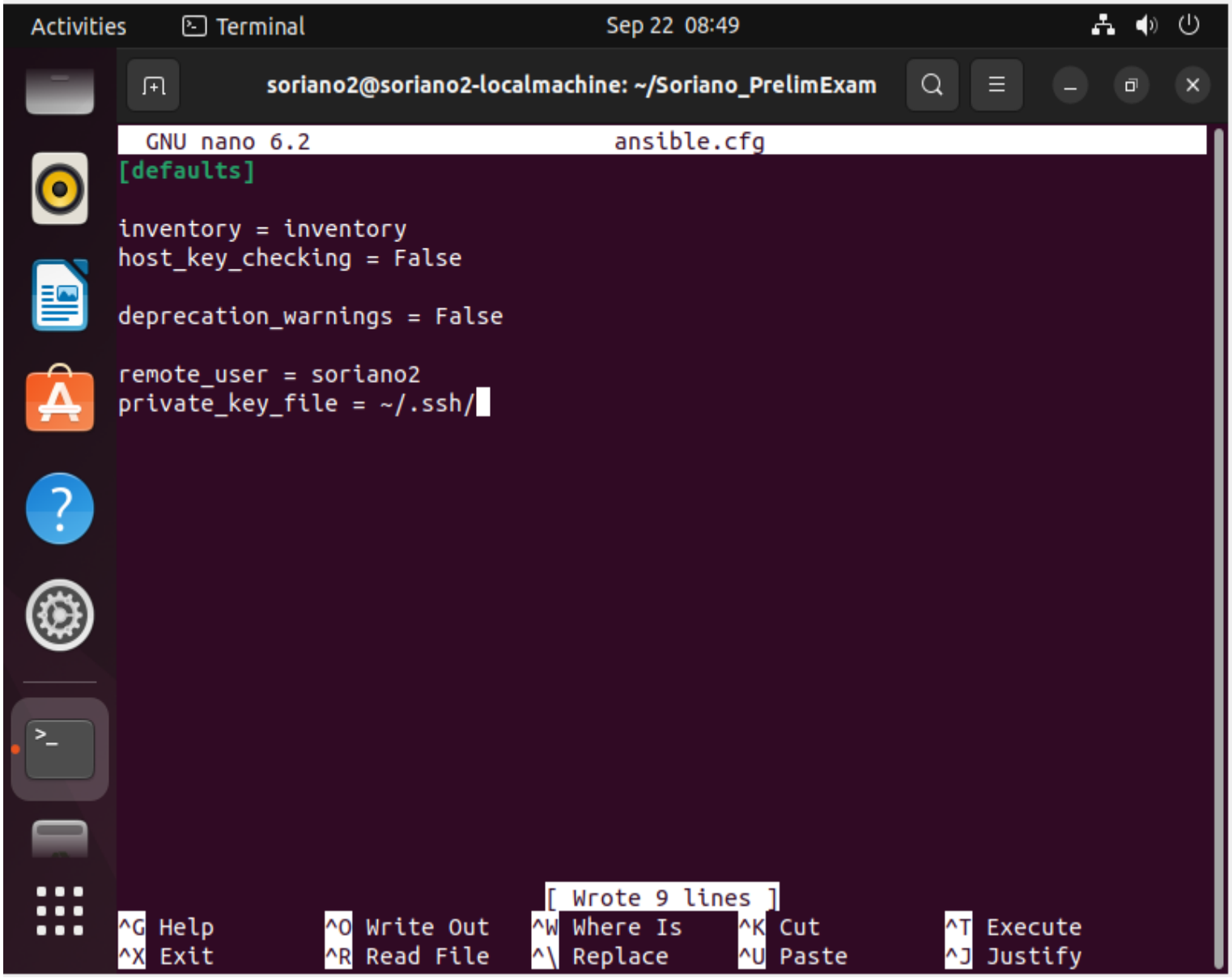
SCREENSHOT #6:



SCREENSHOT #7:

```
soriano2@soriano2-localmachine:~/Soriano_PrelimExam$ cat inventory
192.168.56.105
192.168.122.1
soriano2@soriano2-localmachine:~/Soriano_PrelimExam$ nano inventory
soriano2@soriano2-localmachine:~/Soriano_PrelimExam$ S
```

SCREENSHOT #8:



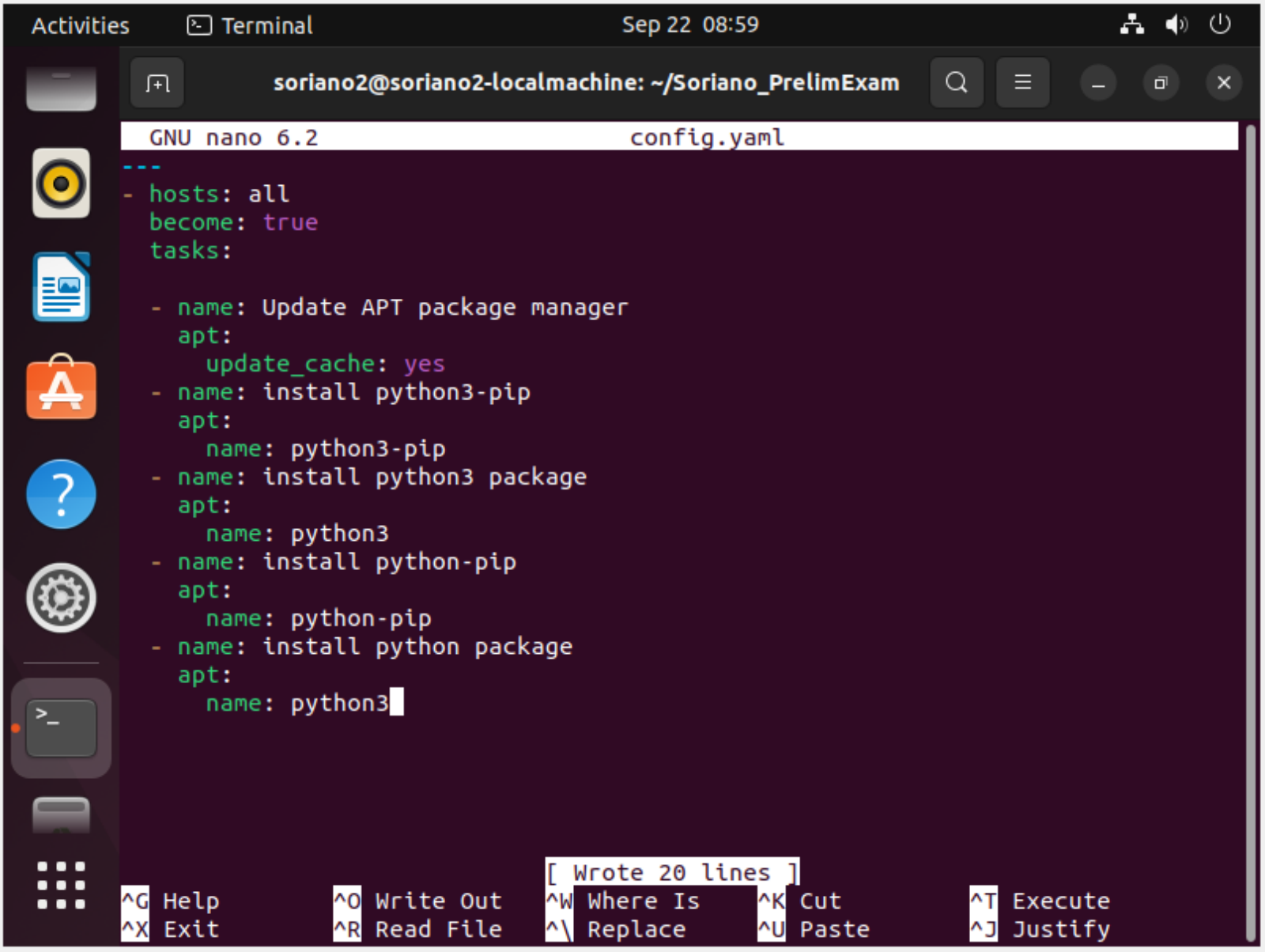
SCREENSHOT #9:

```
soriano2@soriano2-localmachine:~/Soriano_PrelimExam$ ls
ansible.cfg  inventory  README.md
soriano2@soriano2-localmachine:~/Soriano_PrelimExam$ cat ansible.cfg
[defaults]

inventory = inventory
host_key_checking = False

deprecation_warnings = False

remote_user = soriano2
private_key_file = ~/.ssh/
soriano2@soriano2-localmachine:~/Soriano_PrelimExam$
```

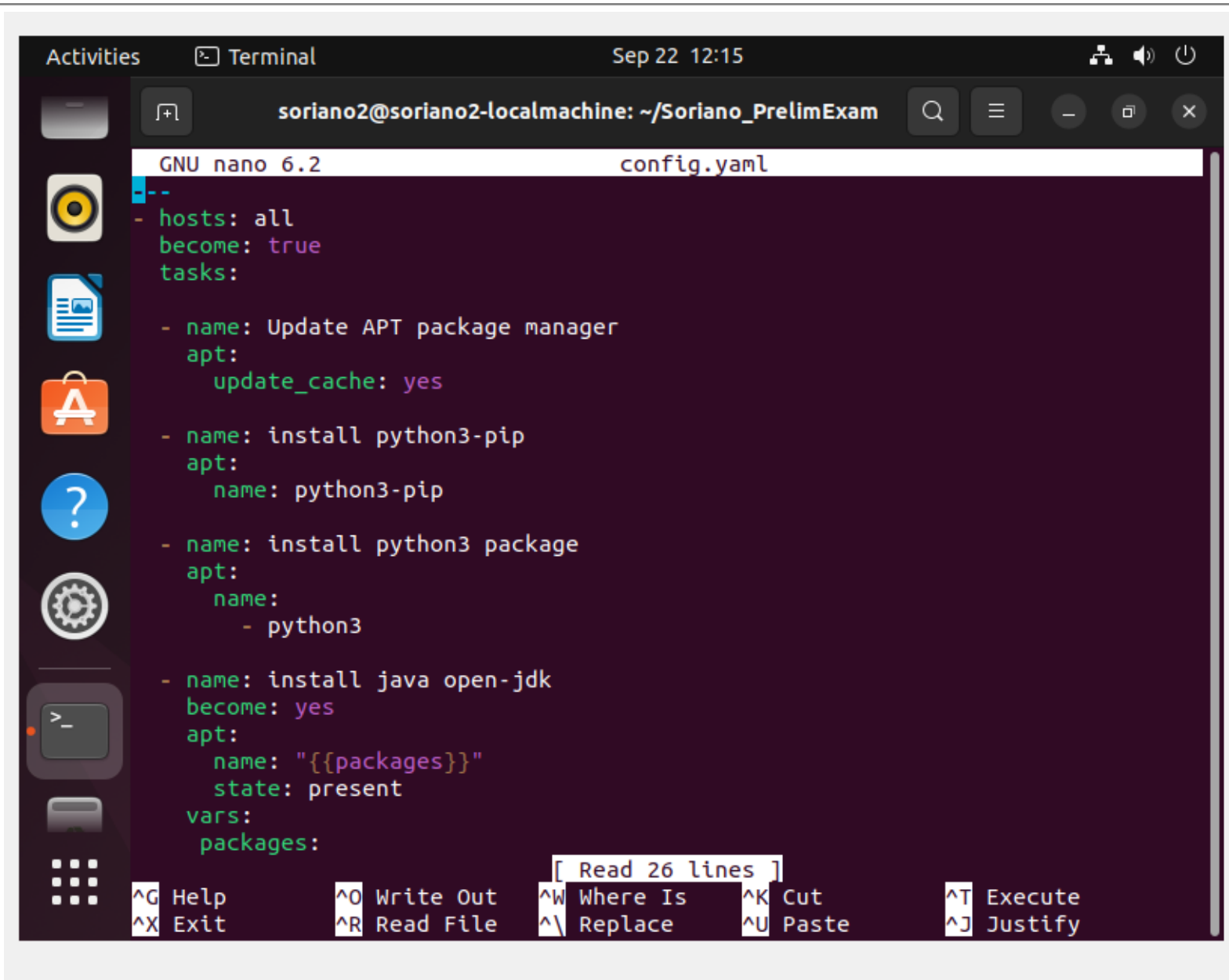
- **These screenshots show that in the control node, I have successfully created an inventory file where the IP addresses of the Server 1 (Server1.1.1), and of the CentOS VM (centos_Soriano) are inserted. Also, the ansible.cfg file is also successfully created. As shown above (Screenshots #8&9), the file that has been created is good and is also accessible.**

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
    - 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

SCREENSHOT #10:



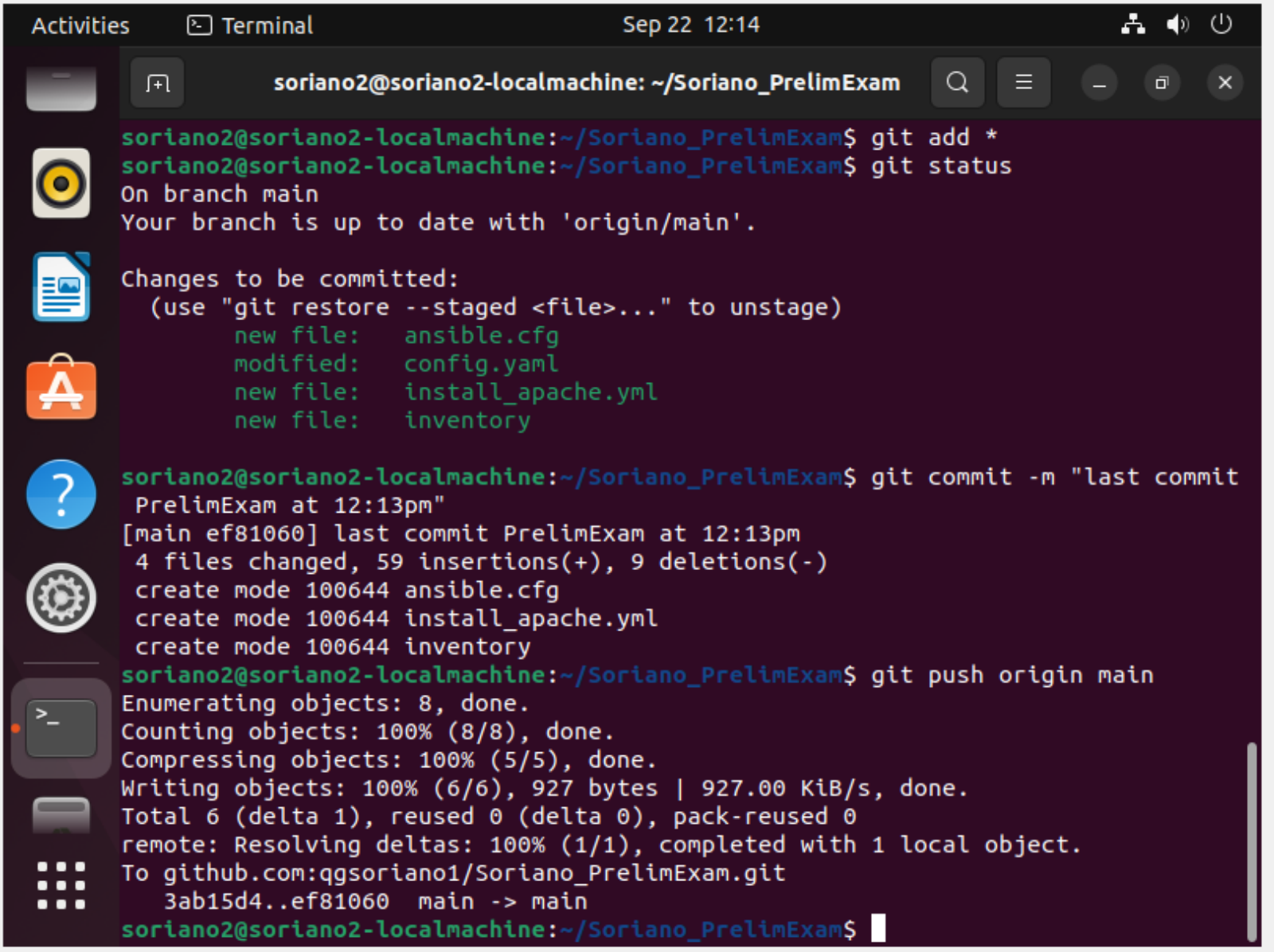
SCREENSHOT #11:



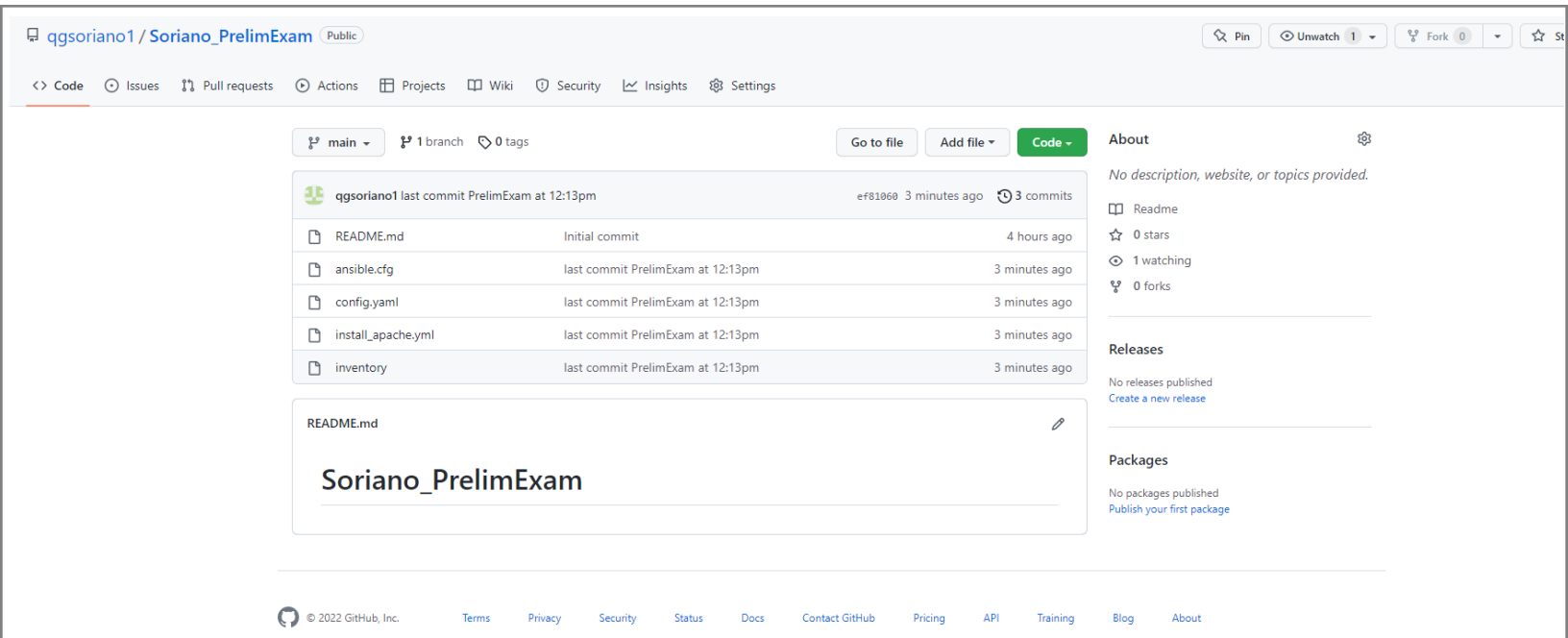
- **This shows the playbook ansible codes that installs the latest python3 and pip3, and also the java installation.**

5. PUSH and COMMIT your PrelimExam in your GitHub repo

SCREENSHOT #12:



SCREENSHOT #13:



- **This shows a successful github commit, add, and push commands.**

6. Your document report should be submitted here.

7. For your prelim exam to be counted, please paste your repository link here.

GitHub repository links

HTTPS: https://github.com/qgsoriano1/Soriano_PrelimExam.git

SSH: git@github.com:qgsoriano1/Soriano_PrelimExam.git

GitHub CLI: gh repo clone qgsoriano1/Soriano_PrelimExam