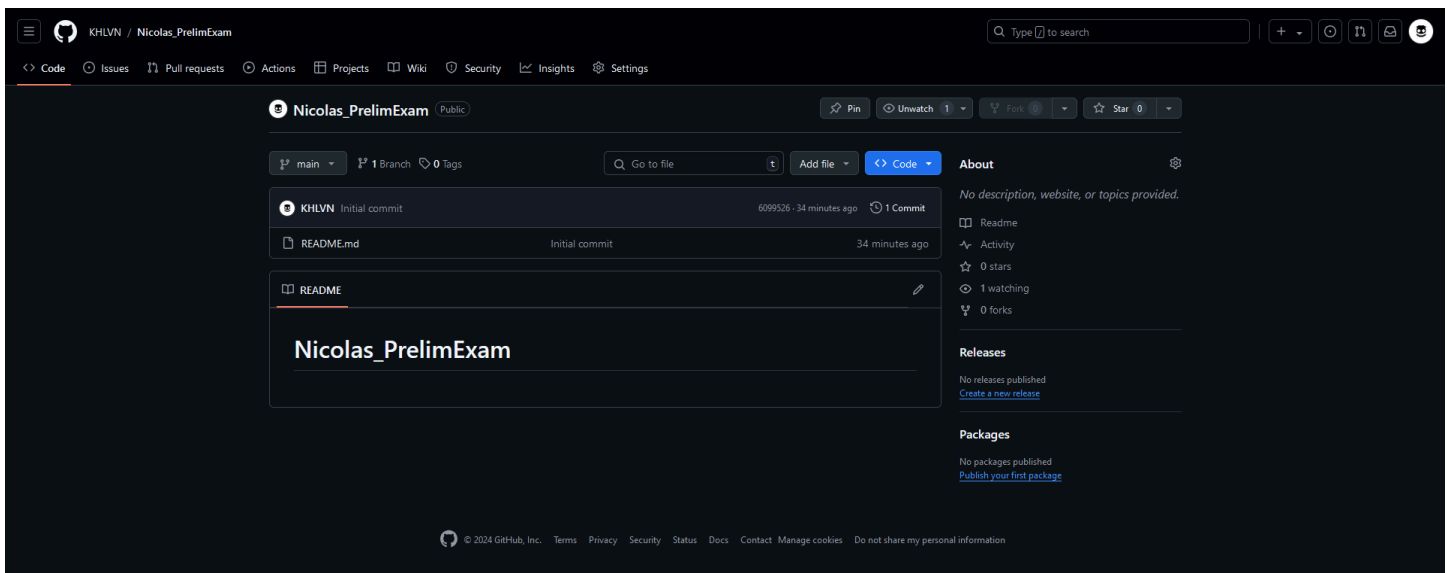


CPE 212 Prelim Exam

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CPE31S2 - CPE 212

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.

```
punopaughey@workstation:~/Nicolas_PrelimExam$ ls -ls ~
total 52
 4 drwxr-xr-x 2 punopaughey punopaughey 4096 Aug 21 09:25 Desktop
 4 drwxr-xr-x 2 punopaughey punopaughey 4096 Aug 21 09:25 Documents
 4 drwxr-xr-x 2 punopaughey punopaughey 4096 Aug 21 09:25 Downloads
12 -rw-r--r-- 1 punopaughey punopaughey 8980 Aug 21 09:21 examples.desktop
 4 drwxr-xr-x 2 punopaughey punopaughey 4096 Aug 21 09:25 Music
 4 drwxrwxr-x 3 punopaughey punopaughey 4096 Sep 18 08:20 Nicolas_PrelimExam
 4 drwxr-xr-x 2 punopaughey punopaughey 4096 Aug 21 09:25 Pictures
 4 drwxr-xr-x 2 punopaughey punopaughey 4096 Aug 21 09:25 Public
 4 drwxr-xr-x 2 punopaughey punopaughey 4096 Sep 16 09:02 Task1
 4 drwxr-xr-x 2 punopaughey punopaughey 4096 Aug 21 09:25 Templates
 4 drwxr-xr-x 2 punopaughey punopaughey 4096 Aug 21 09:25 Videos
punopaughey@workstation:~/Nicolas_PrelimExam$
```

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

```
punopaughey@workstation:~/Nicolas_PrelimExam$ cat ansible.cfg
[defaults]
inventory = inventory
remote_user = punopaughey
host_key_checking = true
punopaughey@workstation:~/Nicolas_PrelimExam$
```

```
punopaughey@workstation:~/Nicolas_PrelimExam$ cat inventory
server1
server2
punopaughey@workstation:~/Nicolas_PrelimExam$ ansible all -m ping
server2 | SUCCESS => {
    "changed": false,
    "ping": "pong"
}
server1 | SUCCESS => {
    "changed": false,
    "ping": "pong"
}
punopaughey@workstation:~/Nicolas_PrelimExam$
```

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

Ansible Playbook Documentation

config.yaml

Proof of Ansible Playbook working

Installs the latest python3 and pip3

```
TASK [Installs Python3 and pip3] *****
ok: [server1]
ok: [server2]
```

```
punopaughey@server1:~$ apt list --installed | grep python3
WARNING: apt does not have a stable CLI interface. Use with caution!
libpython3-dev/bionic-updates,now 3.6.7-1~18.04 amd64 [install
libpython3-stdlib/bionic-updates,now 3.6.7-1~18.04 amd64 [in
libpython3.6/bionic-updates,bionic-security,now 3.6.9-1~18.0
nstable]
libpython3.6-dev/bionic-updates,bionic-security,now 3.6.9-1-
4 [installed,automatic]
libpython3.6-minimal/bionic-updates,bionic-security,now 3.6.
amd64 [installed]
libpython3.6-stdlib/bionic-updates,bionic-security,now 3.6.9
amd64 [installed]
python3/bionic-updates,now 3.6.7-1~18.04 amd64 [installed]
python3-apport/bionic-updates,bionic-updates,bionic-security
2.20.9-0ubuntu7.29 all [installed]
python3-apt/bionic-security,now 1.6.5ubuntu0.5 amd64 [instal
3.6.6]
python3-aptdaemon/bionic-updates,bionic-updates,bionic-secu
now 1.1.1+bzr982-0ubuntu19.5 all [installed]
python3-aptdaemon.gtk3widgets/bionic-updates,bionic-updates,
ic-security,now 1.1.1+bzr982-0ubuntu19.5 all [installed]
```

```
punopaughey@server2:~$ apt list --installed | grep python3-pip
WARNING: apt does not have a stable CLI interface. Use with caution!
python3-pip/bionic-updates,bionic-updates,bionic-security,bion
0.1-2.3-ubuntu1.18.04.8 all [installed]
punopaughey@server2:~$
```

use pip3 as default pip & use python3 as default python

```
TASK [sets python3 and pip3 as default] *****
changed: [server2]
changed: [server1]
```

```
punopaughey@server1:~$ cat .bashrc | grep pip3
alias pip=pip3
alias pip=pip3
punopaughey@server1:~$ cat .bashrc | grep python
alias python=python3
alias python=python3
punopaughey@server1:~$
```

```
punopaughey@server2:~$ cat .bashrc | grep python
alias python=python3
alias python=python3
punopaughey@server2:~$ cat .bashrc | grep pip3
alias pip=pip3
alias pip=pip3
punopaughey@server2:~$
```

Install Java open-jdk

```
TASK [Installs Java-open-jdk] *****
ok: [server2]
ok: [server1]
```

```
punopaughey@server1:~$ apt list --installed | grep openjdk-11-jdk
WARNING: apt does not have a stable CLI interface. Use with caution in scripts.

openjdk-11-jdk/bionic-updates,bionic-security,now 11.0.19+7-us1-0ubuntu1-18.04.1
amd64 [installed]
openjdk-11-jdk-headless/bionic-updates,bionic-security,now 11.0.19+7-us1-0ubuntu
1-18.04.1 amd64 [installed,automatic]
punopaughey@server1:~$
```

```
punopaughey@server2:~$ apt list --installed | grep openjdk-11-jdk
WARNING: apt does not have a stable CLI interface. Use with caution in scripts.

openjdk-11-jdk/bionic-updates,bionic-security,now 11.0.19+7-us1-0ubuntu1-18.04.1
amd64 [installed]
openjdk-11-jdk-headless/bionic-updates,bionic-security,now 11.0.19+7-us1-0ubuntu
1-18.04.1 amd64 [installed,automatic]
punopaughey@server2:~$
```

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)"

```
TASK [creates motd banner] *****
ok: [server1] => {
    "msg": "Ansible Managed node by punopaughey"
}
ok: [server2] => {
    "msg": "Ansible Managed node by punopaughey"
}
```

Git ad

Create a user with a variable defined in config.yaml

```
TASK [creates user in linux] *****
changed: [server1]
changed: [server2]
```

```
punopaughey@server1:~$ cat /etc/passwd | grep khlvn
khlvn:x:1001:1001:~/home/khlvn:/bin/sh
punopaughey@server1:~$
```

```
punopaughey@server2:~$ cat /etc/passwd | grep khlvn
khlvn:x:1001:1001:~/home/khlvn:/bin/sh
punopaughey@server2:~$
```

7. For your prelim exam to be counted, please paste your repository link here. (Failure to submit will result in ZERO)

https://github.com/KHLVN/Nicolas_PrelimExam