Week 14 Assignment

For this assignment, you will utilize Python to automate a series of tasks.

Description

If you login to the ssh server and execute the who command, you can quickly see who is logged in. If you choose one of those logins and issue the groups command prior to the login id, you will see what groups the user is a member of (i.e. groups d00001234).

As a system administrator, you want to be able to run a python script and collect various information from a remote machine.

Here are some various runs of my script:

```
joe@yavin:~/s23/it3110/scripts/python$ python3 get_user_info.py
usage: get_user_info.py [-h] [-u USER] -o {1,2,3}
get_user_info.py: error: the following arguments are required: -o
{\tt joe@yavin:~/s23/it3110/scripts/python\$~python3~get\_user\_info.py~-o~0}
usage: get_user_info.py [-h] [-u USER] -o {1,2,3}
get_user_info.py: error: argument -o: invalid choice: '0' (choose from '1', '2', '3')
joe@yavin:~/s23/it3110/scripts/python$ python3 get_user_info.py -o 1
   The sorted users:
           d00147808
           d00147808
           d00293846
           d00353644
           d00368962
           d00419669
           d00483737
           d00498305
joe@yavin:~/s23/it3110/scripts/python$ python3 get_user_info.py -o 2
        The process sshd, is being ran by 12 users
        The process
                         bash, is being ran by 8 users
        The process ssh, is being ran by 4 users
The process ping, is being ran by 1 users
        The process gpg-agent, is being ran by 1 users
        The process ssh-agent, is being ran by 1 users
joe@yavin:~/s23/it3110/scripts/python$ python3 get_user_info.py -o 3 -u d00419663
The user is d00419663
IDK when that user last logged in
joe@yavin:~/s23/it3110/scripts/python$ python3 get_user_info.py -o 3 -u d00419669
The user is d00419669
The user d00419669 logged in at 15:41
```

You can choose what your script does but it must at a minimum:

- Validate user arguments
- Do different things based on at least 4 different arguments that it receives
- Remotely login to a machine for any selected argument
- Do something that is system administration related.

To submit

A document that outlines what your script does and how it simplifies a system administration task for you. It should perform a non-trivial function and something that is useful to a system administrator.

- · Screenshots of your script in action
- A copy of your script