

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
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