CSE 313   Homework Assignment 3

Theme: Chapters 8-12

Due:

Friday, 10-December-2021 by 23:59

Deliverables:

The following should be completed and submitted by the due date and time specified above. Submissions received after the deadline will be subject to the late policy described in the syllabus. Submit using MS Teams or in person in class.

Acceptable formats for the submissions include:

- o Printed or neatly handwritten document (scanned)
- o Microsoft Word, text, or PDF document
- o Other similar methods

Grading Information:

This assignment is worth 100 points. Each task or question is worth 10 points.

Problem Set (assume the current user has username {your first initial}{your last name}):

1. Fill in the grid below with the meaning of each intersection, for each, indicate how a service could be in that configuration:

	Inactive	Active
Disabled		
Enabled		

2. Choose two of the above grid locations. Show the command you would execute to cause the sshd service to move from one of the grid locations to another.
3. Why does enabling an inactive service not cause the service to begin running? Why does stopping an enabled service not cause the service to become disabled?
4. List the three ways (commands) you could use to have a currently running service to use a new configuration. Which of the three ways would result in a new PID?
5. What is the command to log into a remote shell?
6. Explain the difference between a public key and a private key.
7. What is the process for allowing a user to log into a remote shell without a password? You may list the commands.
8. Define the terms device and connection in terms of networking?
9. Create a static connection for device eth0 with the IPv4 address of 192.168.11.1/16 and gateway of 192.168.255.254. Name this connection "hw-eth0". Add the DNS 192.168.255.255. Activate this connection. How would you check to make sure the connection was activated?
10. Add the IP address 10.10.10.10/16 to the connection created in question 9:
    a. How would you do this using the nmcli command?
    b. How would you do this by editing the configuration file?