**Instructions:**

This handout is just for practice. It is the responsibility of the student to attend class to mark their own work in class when your professor takes up this exercise. You are NOT required to hand this practice sheet into your professor (keep it for future practice).  
  
The answers to this handout will NOT be posted or emailed to students.

**Write the answer to each question below the question in the space provided. You can “wrap-around” the answer on separate lines if you need more space.  
  
Questions:**

1. **What is a “Linux Cluster”? What is an advantage of using a Linux cluster?**A Linux cluster is a connected array of [Linux](https://susedefines.suse.com/definition/linux/) computers or nodes that work together and can be viewed and managed as a single system. Nodes are usually connected by fast local area networks, with each node running its own instance of Linux. Nodes may be physical or virtual machines, and they may be separated geographically. Each node includes storage capacity, processing power and I/O (input/output) bandwidth. Multiple redundant nodes of [Linux servers](https://susedefines.suse.com/definition/linux-server-2/) may be connected as a cluster for [high availability](https://susedefines.suse.com/definition/high-availability/) (HA) in a network or [data center](https://susedefines.suse.com/definition/data-center/), where each node is capable of failure detection and recovery.

Compared to a single computer, a Linux cluster can provide faster processing speed, larger storage capacity, better data integrity, greater reliability and wider availability of resources.

1. **List three unique server names at Seneca college and briefly explain the purpose of that server.**
2. **List the steps to connect and login to your Matrix Seneca College account on your home computer.**
3. **List alternative methods to connect to your Matrix account, including if you have an   
   Apple Mac computer or are running the Linux operating system.**
4. **List 3 unique ways to log out of your Matrix account   
   (not including closing the SSH window or application).**
5. **What is the difference between a Linux command and an argument?**
6. **What is the purpose of a Linux command option?**
7. **What character(s) is used to separate commands and arguments?**
8. **Create a table listing each Linux command, useful options that were mentioned in the online assignment #1 and command purpose for the following Linux commands:  
     
   pwd , cd , ls , cal , date , who , w , whoami , who am I , clear**