**Prelab 1. Basic Linux Commands (Due date: 4:00pm March 13, 2020)**

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| * The TLCL book is publicly available at: <http://sourceforge.net/projects/linuxcommand/> * Submit a prelab report with your answers (in PDF) * HGU CSEE Standard on assignments:   + Submitting assignments or program codes written by others or acquired from the internet without explicit approval of the professor is regarded as cheating.   + Showing or lending one’s own homework to other student is also considered cheating that disturbs fair evaluation and hinders the academic achievement of the other student.   + It is regarded as cheating if two or more students conduct their homework together and submit it individually when the homework is not a group assignment. * Prelab report should be your individual work (a prelab report is not a team assignment). It aims to promote every student to read the textbook as the course is moving forward. |

**1. Read Introduction of TLCL (pages xvi-xx) and answer the following questions.**

1. **What does “Linux” refer to in popular usage?**

In popular usage, “Linux” refers to the kernel and all the other free and open source software found in the typical Linux distribution, that is, the entire Linux ecosystem, not just the GNU components,

**2. Read Chapters 1-3 of TLCL (pages 1-24) carefully and exercise all commands in the textbook thoroughly on your local VM. Write an answer to each of the following questions and explain how you find your answer.**

1. **Let us assume that your shell prompt displays as:   
    foo@bar ~/Downloads $  
   What kinds of information you can figure out from it?**Information about username, machine name, and current working directory.  
   The username is foo, machine name is bar, and current working directory is ~/Downloads.  
   And we could know that (through displaying of shell prompt) the shell is ready to accept input.
2. **What are the two different methods to end a terminal session?**  
     
   By either entering the exit command at the shell prompt or pressing ctrl + d.
3. **In order to list all files, including hidden files, in your current directory, how would you write a command?**ls -a  
   (You could also put “**.**” (dot) at the end of the command “ls -a”, like “ls -a .”.)
4. **What does ‘less is more’ mean in the Linux community?**  
     
   As the “less” program was designed as an improved replacement of an earlier Unix program called “more”, “less” command in Linux can do more than “more” command. “less” falls into the class of programs called “pagers,” programs that allow the easy viewing of long text documents in a page-by-page manner. Whereas the “more” program could only page forward, the “less” program allows paging both forward and backward and has many other features as well.  
   For summary, “less” command can do more thing than “more” command. So less is more.
5. **Describe what the following directories are for.**  
     
   - /usr: It contains all the programs and support files used by regular users.  
     
   - /var: This directory contains data that is likely to change; various databases, spool files, user mail,

etc. are located here.  
  
- /dev: This is a special directory that contains device nodes. Here is where the kernel maintains a list

of all the devices it understands.  
  
- /boot: Contains the Linux kernel, initial RAM dis image (for drivers needed at boot time), and the

boot loader.   
  
- /lib: Contains shared library files used by the core system programs. These are similar to dynamic

link libraries (DLLs) in Windows.  
  
- /etc: Contains all of the system-wide configuration files. It also contains a collection of shell scripts

that start each of the system services at boot time.