Systems Software/Programming – Lab Manual

Lab 1 – OS Familiarity and Basic Shell Commands

Section A: There is no submission for this part of the assignment

- **Install Ubuntu in Virtual Machine by the steps provided to you in Course Detail PPT, if not already done so.**
- Get familiarity with Unix/Linux environment – Login, editors gedit/vi, etc
- Get familiarity with directory commands and their options: ls, cd, mkdir, rmdir, pwd
- Get familiarity with file operation commands with its options: cp, mv, rm, cat, head, tail, more, less, chmod, chown etc
- Use redirection operators (>, >>, <) and pipe (|) operator
- Run examples from class presentations (and others) of awk, grep, find, sed and cut commands for file editing operations to understand how they work.

Section B: In this part of the assignment, you will be required to write shell commands to perform the following functions. After executing each command, capture the output in image format.

1. Change the permission of abc.sh to allow read, write and execute permission for the current user but only read and execute for the group and other users.
2. Display the OS and kernel versions that your system is currently running.
3. First, create two text files in1.txt and in2.txt using some editor (Gedit, Vi, etc.). Create a new directory MyOut in the home directory and create a third file out.txt in MyOut, which has combined content from both the input files. (Hint: use redirection operators)
4. Search for a given word in all the three text files (in1.txt, in2.txt and out.txt)
5. Using the **awk** command, display the current directory's total size, including all subdirectories in MegaBytes.

6. Display only the time part using **date** and **cut** shell commands.

Submission:
StudentID.zip with all commands and screen shorts from Section B.