Linux Operating System
Exercise 2

1. Create a file ‘lab2.log’ in the cdsclab/ex2 directory. Write at least 20 pages of text in the ‘lab2.log’ using your favorite editor. Display the contents of the ‘lab2.log’ from the fifth line using the *more* command.
2. Use ‘ll’ and ‘more’ command to display the /etc directory information. ‘*ll /etc | more -10’*
3. Display the contents of the ‘lab2.log’ file and display the line number. ‘*less -N lab2.log*’
4. Create a file ‘lab3.log’ in cdsclab/ex2 directory. Display the first 5 lines of ‘lab2.log’ and ‘lab3.log’ using the ‘*head -n 5*’ command.
5. When new content is added to the ‘lab2.log’ it is updated automatically and you can view this using ‘*tail -f*’ command.
6. To confirm whether gcc is installed use ‘which’ command.
7. Search for the path to the gcc source code. ‘*whereis -s gcc*’
8. Search for all files beginning with sh in the /etc directory. ‘*locate /etc/sh*’
9. Print all the names ending with .txt or .pdf in the current directory. ‘*find . \(-name “*.pdf” or -name “*.txt” \)’*

10. Print all file names in the current directory that don’t end with .txt. ‘*find . ! -name “.txt”’*
11. Print all files whose permissions under the current directory are not 777 and 664. ‘*find . -type f \(! -perm 777 -and ! -perm 644 \)*’
12. To find all the ‘txt’ files in the current directory and display their detailed information. ‘*find . -name "*.php" -exec ls -l {} \;*’
13. Create a text file called ‘lab3.txt’ in the cdsclab/ex2 directory and type the following text ‘1i2i3i4i5i6i7i8i9’. Convert a single line input to multiple lines of output. ‘*cat lab3.txt | xargs -d i -n 3*’
14. Count the number of bytes, lines, and characters of a file, print only numbers, and do not print the file name. ‘*cat lab3.txt | wc -c/l/m*’
15. Take out the root line in the /etc/passwd file, and add the color to the keyword. ‘*grep "root" /etc/passwd –color=auto*’
16. What command is used on Linux in order to change the owner of a file or directory?
17. Which file contains a list of users on a Linux system?
18. If a directory with “r w x r w x r w x” permissions is copied using the cp command, will the permissions be the same on the new directory?

19. List the file system type. ‘*df -T*’
20. Display the space occupied by the specified file and display it in a format that is easy to read. ‘*du -h lab3.txt*’