

Assignment 1 (Introduction to Linux OS)

[For Groups G21, G23]

Total Marks=10

1. Create a directory named CSE under your home directory. Navigate into CSE and create two subdirectories named *ProjectA* and *ProjectB*. Inside *ProjectA*, create a text file called *report.txt* and write a few lines of text into it using only terminal commands (*Use vi editor*). Also, create a new subdirectory called *Backup* inside *ProjectA*.
 - a. Copy only the *report.txt* file from *ProjectA* into the *ProjectB* directory, renaming it to *copy_report.txt* in the process.
 - b. Navigate to *ProjectB*. Change the permissions of *copy_report.txt* so that the group has only read permission, others have no permissions at all, and the user has full access.
 - c. Use a Linux command to display the numeric (octal) representation of the file permissions for *copy_report.txt*. **[Marks=2+3+1=6]**
2. Create a text file and insert lines of text that contain the keyword "Linux101" multiple times throughout the file. Then, write a shell script that searches for the keyword "Linux101" in the file and
 - a. Counts the total number of occurrences of the keyword.
 - b. Displays the line numbers where the keyword appears. **[Marks =4]**