Dept. of CSE, IIITDM Kancheepuram

COM301P – Operating Systems October 8, 2021

<u>Lab Assignment – 7</u>

In this lab, you will implement basic awk and grep commands.

- (1) Create a text file with employee details like EmplD, EmpName, Department, Salary, Years of experience (Use awk).
 - a. Print the rows of employees who belong to a specific Department.
 - b. Print the employee details whose salary is 35000 with line numbers.
 - c. Print length of the maximum row in the specific range (use NR for Row Number).
 - d. Print employee details with Header and Footer.
 - e. Print Employee details, whose salary is greater than 45000, print first, second and last column of the file.
 - f. Print average salary of the employee
- (2) Use awk command to
 - a. Print "n" random numbers.
 - b. Print sum of cubes of first "n" even numbers.
 - c. Print Environmental variables set on Machine.
 - d. Print path of "Home".
- (3) Create three files with text and Use grep to
 - a. Print lines from all the files with matching lines with ignored cases.
 - b. Print "n" lines "Previous" and "Next" to the matching pattern with matching line.
 - c. Print all the lines that do not match the given pattern.
 - d. Print lines that match the given pattern in specific colour.
 - e. Print all patterns that match A-Z and 0-9 from the file.

Submission Instructions:

- Submit your assignment file in the Google classroom.
- After writing the code for each problem, write your own explanation in plain paper (Own Handwriting). Write your Name and Roll No in each page.
- Attach the screen short of the output after the execution of the program.
- Save all the above things of all the programs in to one file and save as RollNo_Lab#.pdf (Example: EC20B1001_Lab7.pdf) and upload.
- Make sure the program description(handwritten), program, output screenshot for all questions are included in a **single pdf** as mentioned above.
- Save all the C program files as per the format RollNo_Lab#_QuestionNo.c (Example: EC20B1001_Lab7_Q2.c) and upload.
- Any form of plagiarism/copying from peer or internet sources will lead penalty.
- NOTE: DO NOT ZIP THE FILES.