**Linux Foundation Webinar Video Link:**

<https://drive.google.com/file/d/1q5z3CI8EESOLLBwwdSzlhhP4UQaei8CK/view?usp=sharing>

LINUX ASSIGNEMENT Due Date: 25-07-2020 11:59 PM

Note: To do the following exercises you can use your own Linux platforms or go with free online Linux interpreters for instance (<https://www.webminal.org/> : Registration and sign in required). Execute all following activities with your credentials and take screenshots under a pdf file, share the pdf at Microsoft team under Linux Internals Channel.

**Activity 1:**

1. Log into the system.
2. Execute system utilities: date, cal, who, man, etc...
3. File handling utilities: cat, more, touch
4. Directory handling utilities: mkdir, rmdir, cd, ls, pwd etc

**Activity 2:`1**

1. Create a file called **student.txt** which contains individual student details i.e. roll number, name, branch, section, mail\_id, phone number each column separated by pipe (|) delimiter.
2. Count number of characters, words and lines in **student.txt**
3. Copy the student.txt content to another file **sample.txt**
4. Move the file sample.txt content to another file **sample1.txt**
5. Give only owners read permission to **sample1.txt** and try to copy or move or delete that file to another file
6. Give only owners write permission to **sample1.txt** and try to open it
7. Apply soft and hard links to **student.txt** with other new or existing files and write your reflections.

**Activity 3:**

Execute rthe below scenarios with suitable Linux utilities on file **student.txt**

1. Sort according to the third field
2. Sort according to the second character of the sixth field
3. Extract third and fifth fields to new file **extract.txt**
4. Exchange the odd fields with even fields and vice versa of **extract.txt**
5. Extract 2nd character of the 3rd field and vice versa to new file **extract1.txt**
6. Join the files **extract.txt** and **extract1.txt** field wise to new file **join1.txt**
7. Miscellaneous scenarios if any as per the instructor or learner perception

**Activity 4:**

Execute the following scenarios by using grep

### Execute grep with all options especially (v, n, i, c, e, l, A, B, w, h, o)

### Searching for a string in multiple files

### Searching for a sting in all files recursively

### Displaying the non-empty lines

### Displaying the position of the matched string in the line

### Searching multiple mathematical based patterns using egrep.