I. Working with Unix Commands

1.Create a directory 'CSE', change your working directory to ‘CSE’ and display where you are working now? Create files named 'date' and 'user'. Store the calendar and current date information in the file named 'date'. Store the login details of user in the file 'user'.

2.Create a file consisting of countries and their corresponding continents. Display the countries which are in the continent Asia. Sort the generated list and convert them into lowercase.

3.Create files like oldstu.txt, newstu.txt, oldlab.txt, newlab.pdf. Create hidden files called ‘stu’ and ‘oldfiles’. Search for files having the pattern "stu" and "old" in the current directory.

4.Create a file maks_numbered.txt using the file marks.txt. The new file should like

1:89 92 85

2:98 47 67

3:67 82 76

4:78 97 60

5:67 68 69

5.Sort the file marks.txt based on the third column.

6.Create two files NameList and MarkList. Add necessary information. Merge the contents of files NameList & MarkList and store it in a student file.

7.List all the files recursively in a directory.

8.Display the tenth line of the file 'NameList.txt'.

9.Count the number of lines, words and Characters in the 'NameList.txt' file.

10.Display the count of the number of lines having the word "Programming" in the file Python.txt using only the 'grep' command.

11.Display all the lines which do not contain the word "Programming" in Python.txt using only the 'grep' command.

12.Change the permission of the file 'NameList.txt', so that all the users, group and others can only read and write it.

13.Display all the files in the ‘CSE’ directory according to their size (ascending order), using only the ‘ls’ command.

14.List all those files whose filename has only one character or number as its name (example: filenames like 3.txt, g.txt, h.txt).

15.Illustrate the difference between diff and cmp commands using an Example.

II. Simulating Unix commands using C Program

1.Write C programs to simulate the following commands in Unix Operating system.

- head
- tail
- cp
- mv