1. Write a shell script to find greatest amongst three numbers.
2. Write a shell script to find all prime numbers in given range.
3. Write a shell script to draw following pattern.
   ```
   *
   * *
   * * *
   * * * *
   * * * * *
   ```
4. Write a shell script to find sum of digits of a number.
5. Write a shell script to print fibonacci series upto entered value N.
6. Write a menu driven shell script which accepts basic amount as an input and displays following options.
     a. Dearness allowance (90% of basic)
     b. Provident Fund F (12% of basic)
     c. House Rent Allowance (20% of basic + DA)
     d. Income tax deducted (5% of basic + DA + HRA)
     e. Take home salary (basic + DA + HRA – IT)
7. Write a shell script to find file permissions of user, group and others.
8. Write a shell script that accepts two files are identical or not.
9. Write a shell script to display all the words, having length <4 characters, of a file f1.txt
10. Write a shell script to find total number of files and total number of directories in current working directory.
11. Write a shell script to find total number of characters, words and lines of a file. (Do not use *wc* command.
12. Write a shell script which accepts a username and check the entered user is currently logged in or not.
13. Write a shell script to find total number of occurrences of SDJIC in given file. (Please provide necessary validations)
14. Write a shell script which accepts filename as input and reverse individual words from it. (Please provide necessary validations)
15. Write a shell script to display all the lines from a file (11.txt), which starts with text "unix". (not case sensitive)
16. Write *grep* command to perform following actions:
     a. Count number of blank lines in file f1.txt
     b. print all lines containing *sdjic*
     c. print the lines that starts with *sdjic*.
     d. Search the files in CPROGRAMS directory which has the string "include"
     e. print lines having exactly 50 characters in file f1.txt
     f. Count number of blank lines in file f1.txt
     g. Display lines having atleast one characters in file f1.txt
     h. Display lines having *sdjic* text in any case in file f1.txt
     i. Display line of file f1.txt having exactly 3 characters
     j. Display lines of file f1.txt which begin with any alphabet

     k. Display lines whose last word is "UNIX" in file f1.txt

l. Display filenames having last character as digit [0-9]
m. Display list of filenames that only consist digits
n. Display line of file f1.txt which only consist digits
o. Display lines of file f1.txt which only consist capital alphabets
p. Search all lines in file f1.txt which ends with "."

17. Write sed command to perform following tasks
   a. To print only last line of f1.txt
   b. To print line number 1-3, 6-7 and 10 of f1.txt
   c. To print lines beginning with SDJIC of f1.txt
   d. Print three lines starting from fourth line of f1.txt
   e. Print all blank lines of file f1.txt
   f. Print lines having either of "sdjic" or "sdjyc"
   g. Lines beginning with either alphabet or digit
   h. To insert a line "additional line" before every line
   i. To replace every occurrence of | with : of first three lines
   j. To replace every occurrence of "|" with ":" of every line
   k. To remove all the lines having word "fail" from file f1.txt (delete command)

Note:
- Lab journals are to be submitted in journal files only.
- Index with proper page number is mandatory.
- Journal submission date will be declared during lectures.

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