Practice Questions on Regex, Grep, Sed

1. Write a regular expression to match the following patterns:
    1. cool, coolant, cooler, coolest, coolness
    2. Year between 1900-2099
    3. Floating point number (4 digit precision) Example: 12.1111
    4. Date (format: dd/mm/yyyy, year > 1900) Hint: Beware!! Feb has only 28 days.

2. Write an RE to find out the occurrence of five identical characters consecutively.
e.g. mmmmm, KKKKK

3. Find strings matching the following regex.
    1. [hc]+at
    2. A+B*C?D
    3. a{5} b{,6} c{4,8} d{3,}

4. Write a regular expression to modify string of the form 'A37 B4 C107 D54112 E1103 XXX' to '37:A B4 107:C D54112 1103:E XXX'.

5. Display lines in file "a" which contains "ishaya" (case insensitive) .

6. Display only the matched part of the line in file "a" which contains word "Adeel" (case sensitive).

7. Display name of the file in the current folder which contains the word "kalyani".

8. Display phone numbers from file named "d" which start with "879" and end with "57".

9. Display words from file 'e' which start with 'a', ends with 'z'. It can have any character at second and fourth position and third character has to be either 'f','t' or 'p'.

10. Display student names from file 'c' with last name as either 'Kapase' or 'Lakkad'.

11. Display the line number along with the line content, in the file 'c', which does not contain the word 'rahul' (case insensitive).

12. Display a list of words in the file "e", which doesn't contain substring 'abc'.

13. Replace "iiit" by "IIIT" in file 'b' and reflect updates to the original file. Use sed alone.

14. Replace " " by "%20" in file 'f' and reflect updates to the original file. Use sed alone.

15. Print all the directories in current folder along with their size. Hint: use awk command only.

16. Use employee file for the following questions:
    1. Print all employees having salary > 25000.
    2. Print age of employees whose name starts with 'R'.
    3. For all employees having age > 23, increment their salary by 10%. Replacement should reflect in original file.