1. Write LEX program for each of the following problems:
    a. To copy content of a file to another file.

    b. To make the content of a file in sentence case.

    c. To count total number of tokens

    d. To count the number of lines, spaces and tabs

    e. To count number of words

    f. To count words that are of length less than 10 and greater than 5

    g. To count the number of vowels and consonants in a given string

    h. To search for a word in a file.

    i. To find the length of the longest word

    j. To count the frequency of the given word in a file

    k. To Count the Positive numbers, Negative numbers and Fractions

    l. To Identify and Count Positive and Negative Numbers

    m. To check whether given number is Armstrong number or not

    n. To check whether a given number is even or odd

    o. To check whether a number is Prime or Not

    p. To check valid Mobile Number

    q. To check whether an email address is valid or not

    r. To check whether an IP address is valid or not.

    s. To add line number to a given file.

    t. To remove comments from C program.