CS6109 - COMPILER DESIGN – LAB Week 4 – 14.08.2023

(Exercises)

1. Write a Lex program to perform the following.
   a. Reversing each line in a text file
      Input:
      ```
      HAI hello
      example
      good
      alpha NUMeric
      ```

   b. Matches one or more alphanumeric characters.
      Input:
      ```
      alphanumeric
      ag@
      hai123
      123HELLO
      example@2022
      #good#
      2
      B
      @
      ```

   c. Matches the string starts with "b" followed by one or two occurrence of "an" and ends with zero or one occurrence of "a".
      Input:
      ```
      bana
      banana
      banaaa
      bananana
      banaa
      ban
      ba
      banan
      ```

d. Find the capital letters for a given input string.
Input:
        HelLo
        GoOD
        AlphA
        EXamPlE
        hAi An

2. Write a Lex program to identify the tokens for the given input expression.

   a. c = ++a + ++b

   b. c = a ++ + ++b

Note:
- Consider the inputs for each program from text file.
- Multiple input files can be considered.