

## **Assignment on Lex and C**

(Individual submission)

**Submission Deadline: 24/08/2019**

1. Write a program to print the content of a given file along with the line numbers.
2. Write a program to remove the comment lines (single line as well as multiline comments) from a given C program. The file is given as command line argument.
3. Write a program that will display “Welcome to Systems Programming Lab” when the input string is “Which lab” or “Lab name?”
4. Write a program to identify identifiers, keywords and loops in a given C program.
5. Write a program to print and count number of vowels and consonants (lower case as well as upper case) in a given file. Use command line argument.
6. Write a program to display the alert message “Limit crossed” while the word “limit” has been occurred more than 4 times in a given file. The file is given as command line argument.
7. Write a program to identify various operators of C, given in a C program.
8. Write a program to display and count the number of integers, floating point numbers and strings which are present in a given file.
9. Write a C program to convert an NFA into DFA.
10. Implement 'grep' command of LINUX system.
11. Write a program to identify different data types which are present in a given C program. Store the data types in a table. Give an error message if a data type is already present in the table (i.e. more than one occurrence of a data type).