EE1102 Introduction to Programming **Assignment 6-B**

Total Marks: 70
Due Date and Time: March 12, 2021 6 pm. **No late submission will be permitted.**
Submission Procedure: Upload the C program files by the due date and time. The files should be named as specified in each problem statement. Replace ROLLNO with your roll number (all small letters). **Do not upload exe files.**

Problem 1. Write a C program called ROLLNO_pointer_manipulate.c that will demonstrate various features of a pointer. Using the following lines

a. int myArray[ ] = {1,24,17,4,-5,100}; //This is only representative
b. int *ptr;
c. ptr = &myArray[0];

Write a program to print the values stored in successive locations pointed to by ptr.

Marks: 15

Problem 2. Write a program called ROLLNO_pointer_count.c to read an input string, assign it to a pointer, and using multiple functions, count how many characters in the input string are vowels, consonants and special characters (numerics, blanks, newline, @, #, $ etc). Output the count at the end as some primitive histogram with "-" as

Vowels : ----------
Consonants : ----------
Special Characters: ----------
main() should read the input and print the count in the desired form and all other operations will have to be performed in various functions defined by you.

Marks: 25

Problem 3. Write a program called ROLLNO_pointer_string.c to read an input string of any length, assign it to a pointer, and print the input characters in the reverse order.

Marks: 25

Problem 4. Follow good programming practice such as documenting with meaningful comments, using meaningful names for variables, and formatting the program. TAs will evaluate if you followed good programming practice in your code and if you printed the results of the above programs in an understandable format.
Marks: 5