

## Data Structures Application: Term Work 1 (12/04/2023)

- 1. Write a C program to read text lines from the following interfaces
  - a. User input (maximum 10 lines to be read)
  - b. Files

Use user-defined functions and display the longest line read. Do not use any inbuilt function.

- 2. Re-wite the above program to find a pattern of letters in the set lines read from
  - a. User input (maximum 10 lines to be read)
  - b. Files

Use user-defined functions and display the lines having the matched pattern of letters Do not use any inbuilt function.

Ah, Dear! could you and I with Fate conspire To grasp this sorry Scheme of Things entire, Would not we shatter it to bits -- and then Re-mould it nearer to the Heart's Desire

Pattern: "ould"

Ah, Dear! could you and I with Fate conspire Would not we shatter it to bits -- and then Re-mould it nearer to the Heart's Desire

- 3. Write a C program to multiply two Matrices, use user-defined functions to perform the following tasks
  - a. Reading of matrix
  - b. Printing of matrix
  - c. Mulitplication of matrix (using pointers as arguments to these functions only)