PROG20799 - Data Structures & Algorithm Development – C
Assignment 2
7.5% of your course mark

Due Dates: Oct 06 @*11:59 PM,* **Late submission is -10% per day for 3 days.**

Instructions: **This assignment is to be completed individually (This means by yourself, MUST meet and comply with Sheridan's rules on academic integrity).**

Please submit the following on SLATE
- **one (1) single document in Microsoft Word or PDF format**. Incorporating screenshots of the **code and the output** into the single document and pay attention to your format.
- A **soft copy (.c file)** for each question so your instructor can test your answer (you must submit the program regardless whether it is complete or incomplete, correct or incorrect).

Please note:
 o Submission multiple pdf or doc files (instead of one document) will not be marked.

Your teacher may ask you to explain your answers to ensure you had done your own work.

```
Input the data for node  1 1
Enter more  (y)es/(n)o ? n

                        ================
                        1)  Display
                        2)  Insert First
                        3)  Insert Last
                        4)  Insert Anywhere
                        5)  Delete First
                        6)  Delete Last
                        7)  Delete Anyone
                        8)  Search
                        0)  Exit
                        Enter your Choice 1

Data at  1  --      1
```

Question: (15 marks)

1. Write a program to manage following operations on a Dynamic link list using C language:
   a. Display List
   b. Insert at First Location
   c. Insert at Last Location
   d. Insert at Given Location
   e. Delete from First Location
   f. Delete from Last Location
   g. Delete from Given Location
   h. Search (based on data)
   i. Exit

   > Make sure to declare Link List Start pointer inside the main function and pass the same to various user-defined functions to perform the required operation.
   >
   > <mark>Assignments using any global variable or without user- defined functions would not be evaluated.</mark>

2. Write appropriate comments in the program

Notes:
- **You are required to complete this assignment WITHOUT ANY OUTSIDE COLLABORATION/HELP.**