Green University of Bangladesh
Department of Computer Science and Engineering (CSE)
Faculty of Sciences and Engineering
Semester: (Summer, Year:2022), B.Sc. in CSE (Day)

LAB REPORT NO 03
Course Title: Data Structure Lab
Course Code: CSE 106 Section: DA

Lab Experiment Name:
Linked List in C Programming Language

Student Details

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Submission Date : 16-08-2022
Course Teacher's Name : Farhana Akter Sunny

Lab Report Status
Marks: …… Signature: .....
Comments: ..... Date:.....

1. TITLE OF THE LAB EXPERIMENT

1. Implement a C program that is able to insert element at beginning, last and any specific position using linked list.
2. Find the specific node of element that is present or not in the singly linked list.

2. AIM

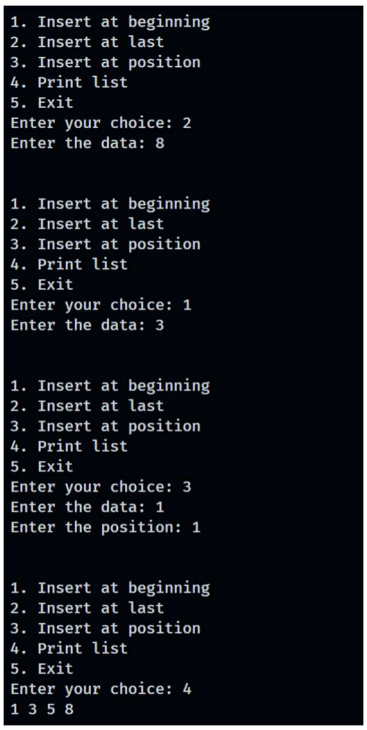
Insert elements to any position of a linked list and search specific element in the linked list.

3. DESIGN

A linked list is a linear collection of data elements whose order is not given by their physical placement in memory. The elements in a linked list are linked using pointers. It is a data structure consisting of a collection of nodes which together represent a sequence. This structure allows for efficient insertion or removal of elements from any position in the sequence during iteration.

4. TEST RESULT / OUTPUT

1.



2.

```
opu@opu:/mnt/d/University$ gcc serchlinkedlist.c -o linkedlist && ./linkedlist
Automatically generated list: 10 9 8 7 6 5 4 3 2 1

Enter the element to find: 4
4 is present in the list

Enter the element to find: 12
12 is not present in the list

Enter the element to find:
```

5. ANALYSIS AND DISCUSSION

Based on the focused objective and basic operations of a singly linked list, the additional lab exercise made me more confident to have a clear understanding about singly linked list and ultimately lead me towards the fulfilment of the objectives.