**Bahria University, Lahore Campus**

Department of Computer Science

Lab Journal 04

**(Spring 2024)**

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| Course: | **Compiler Construction – Lab** | Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Course Code: | CSL 323 | Max Marks: 10 |
| Faculty’s Name: | Mr. M Mudassar |  |

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enroll No: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Objective(s):

Upon completion of this lab session, learners will be able to:

* The objective of this exercise is to get you to write, compile, and run singly link list program in C++ from the scratch by defining a header file for the insertion, searching, and deletion of nodes in the list.

Lab Tasks:

Your lab report is expected to contain the following for each exercise:

* C++ Source Code (any file)
* Screenshot of your output (optional)

## Task 1:

Write a C++ program that implement the concept of singly link list in such a way that it ask user to add a new node in the list either in the beginning, end, or after any certain key node. Same is required for searching and deleting a node. All the functions related to insertion, searching, and deletion of node must be defined in a header file and that header file would be added in the main program which asks user either s/he wants to insert, search, or delete a node, or exit the program. Insertion and deletion would performed according to users interest either at start, end, or at aby specific location.

**Lab Grading Sheet :**

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| --- | --- | --- | --- |
| **Task** | **Max Marks** | **Obtained Marks** | **Comments(*if any*)** |
| 1. | 10 |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| **Total** | **10** |  | **Signature** |

**Note: Attempt all tasks and get them checked by your Lab Instructor.**