

**Modern Education Society's  
Wadia College of Engineering, Pune**

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| <b>NAME OF STUDENT:</b>     | <b>CLASS:</b>                  |
| <b>SEMESTER/YEAR:</b>       | <b>ROLL NO:</b>                |
| <b>DATE OF PERFORMANCE:</b> | <b>DATE OF SUBMISSION:</b>     |
| <b>EXAMINED BY:</b>         | <b>EXPERIMENT NO: DSL C-19</b> |

**TITLE : TO PERFORM VARIOUS OPERATIONS ON LINK LIST .**

**PROBLEM STATEMENT :** The ticket booking system of Cinemax theater has to be implemented using C++ program. There are 10 rows and 7 seats in each row. Doubly circular linked list has to be maintained to keep track of free seats at rows. Assume some random booking to start with. Use array to store pointers (Head pointer) to each row. On demand

- a) The list of available seats is to be displayed
- b) The seats are to be booked
- c) The booking can be canceled.

**OBJECTIVES:**

1. To understand structure of Doubly circular linked list .
2. To understand how to Create, Display and perform various operations on Doubly circular linked list.

**OUTCOMES:**

1. To analyze the problems to apply suitable algorithm and data structure .
2. To discriminate the usage of various data structures in approaching the problem solution .
3. To understand concepts of Linear Data Structure ( Doubly circular linked list ) .

**PER-REQUISITES:**

1. Knowledge of C++ programming .
2. Knowledge of Doubly circular linked list .

**APPARATUS:**

1. OS: Ubuntu 18.04.2 LTS
2. Processor: Intel® Core™ i7-4790S CPU
3. Graphics: GeForce GT 610/PCIe/SSE2
4. Storage: 400 GB
5. Text Editor: gedit
6. Compiler: GNU C++ Compiler (g++)
7. Terminal

**QUESTIONS:**

1. What is a Doubly circular linked list ? Explain with example .
2. Write applications of DCLL.