

Modern Education Society's
Wadia College of Engineering, Pune

NAME OF STUDENT:	CLASS:
SEMESTER/YEAR:	ROLL NO:
DATE OF PERFORMANCE:	DATE OF SUBMISSION:
EXAMINED BY:	EXPERIMENT NO: DSL E-31

TITLE : To implement double-ended queue.

PROBLEM STATEMENT: A double-ended queue (deque) is a linear list in which additions and deletions may be made at either end. Obtain a data representation mapping a deque into a one-dimensional array. Write C++ program to simulate deque with functions to add and delete elements from either end of the deque.

OBJECTIVES :

1. To understand structure of double ended queues.
2. To understand data representation using double ended queue for one-dimensional array.

OUTCOME :

1. To operate on the various structured data.
2. To analyze the problem to apply suitable algorithm and data structure.
3. To discriminate the usage of various structure in approaching problem solution.

PRE-REQUISITES :

1. Knowledge of C++ Programming
2. Knowledge of queue and priority queue.

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. Describe double ended queue operations.
2. How can we process one-dimensional array using double ended queue?
3. What are advantages of double ended queue over simple queue?