

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

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<b>SEMESTER/YEAR:</b> Sem III	<b>ROLL NO:</b> F20111040
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**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 :**

**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?