HE Queue System
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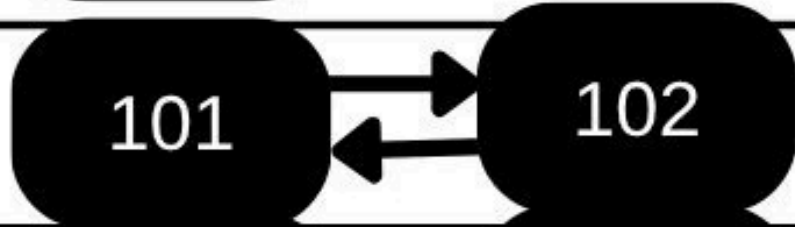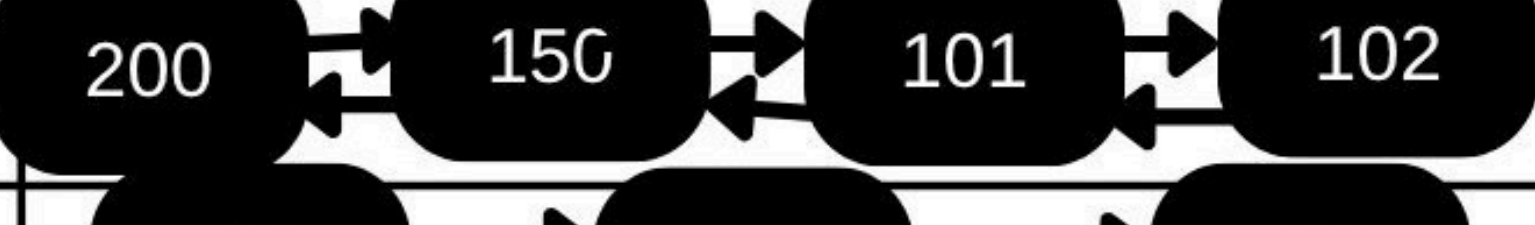## Roll No: 18

Problem Statement

The hospital needs a flexible system to manage patients in the ER, where priority can change quickly. Using a Doubly Linked List, each patient is represented by a node containing patientiD, prev and next pointers. The system supports inserting and deleting patients based on their urgency.

Proposed Solution

- insertAtBeginning() — for critical patients
- insertAtEnd() — for normal walk-in patients
- insertAtPosition() — insert anywhere in the list
- deleteFromBeginning() — remove treated patients:

The list dynamically updates head, tail, and all pointers:

Graphical Representation of Linked List After Performing Each Step

Step	Operation	Result
1	Insert At End(101)	101
2	Insert At End(102)	101 ⇄ 102
3	Insert At Beginning(200)	200 ⇄ 101 ⇄ 102
4	Insert At Position(150,2)	200 ⇄ 150 ⇄ 101 ⇄ 102
5	Delete From Beginning	150 ⇄ 101 ⇄ 102