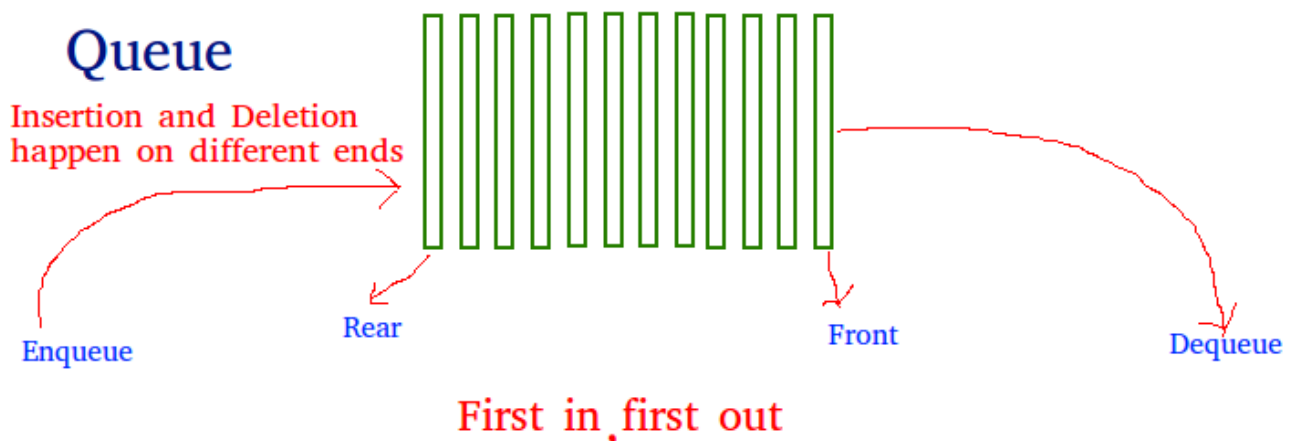


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Queue Data Structure

Recent articles on Queue

A Queue is a linear structure which follows a particular order in which the operations are performed. The order is First In First Out (FIFO). A good example of a queue is any queue of consumers for a resource where the consumer that came first is served first. The difference between **stacks** and queues is in removing. In a stack we remove the item the most recently added; in a queue, we remove the item the least recently added.



Topics :

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Introduction :

1. [Queue](#)
2. [Applications of Queue Data Structure](#)
3. [Priority Queue](#)
4. [Applications of Priority Queue](#)

5. Deque
6. Circular Queue
7. Queue Interface In Java

Implementation :

1. Implement Queue using Stacks
2. LRU Cache Implementation
3. Implement Stack using Queues
4. Queue | Set 2 (Linked List Implementation)
5. How to efficiently implement k Queues in a single array?
6. Implement a stack using single queue
7. Implementation of Deque using circular array
8. Circular Queue | Set 2 (Circular Linked List Implementation)
9. Implement Stack and Queue using Deque
10. Priority Queue using Linked List
11. Priority Queue using doubly linked list
12. Implementation of Deque using doubly linked list

Standard Problems :

1. Check if a queue can be sorted into another queue using a stack
2. Breadth First Traversal or BFS for a Graph
3. Level Order Tree Traversal
4. Reverse a path in BST using queue
5. Construct Complete Binary Tree from its Linked List Representation
6. Program for Page Replacement Algorithms | Set 2 (FIFO)
7. Check whether a given Binary Tree is Complete or not | Set 1 (Iterative Solution)
8. Number of siblings of a given Node in n-ary Tree
9. ZigZag Tree Traversal
10. FIFO (First-In-First-Out) approach in Programming
11. FIFO vs LIFO approach in Programming
12. LIFO (Last-In-First-Out) approach in Programming

Operations on Queue :

1. Reversing a Queue
2. Reversing a queue using recursion
3. Reversing the first K elements of a Queue
4. Interleave the first half of the queue with second half
5. Sorting a Queue without extra space

Misc :

1. Level order traversal in spiral form
2. Sliding Window Maximum (Maximum of all subarrays of size k)
3. Find the largest multiple of 3 | Set 1 (Using Queue)
4. Find the first circular tour that visits all petrol pumps
5. Smallest multiple of a given number made of digits 0 and 9 only
6. Iterative Method to find Height of Binary Tree
7. Implement PriorityQueue through Comparator in Java
8. An Interesting Method to Generate Binary Numbers from 1 to n
9. Minimum time required to rot all oranges
10. Find maximum level sum in Binary Tree
11. Sum of minimum and maximum elements of all subarrays of size k.
12. Distance of nearest cell having 1 in a binary matrix
13. Level order traversal line by line | Set 2 (Using Two Queues)
14. First negative integer in every window of size k
15. Minimum sum of squares of character counts in a given string after removing k characters
16. Queue based approach for first non-repeating character in a stream
17. Averages of Levels in Binary Tree
18. Stack Permutations (Check if an array is stack permutation of other)
19. Check if all levels of two trees are anagrams or not
20. Check mirror in n-ary tree
21. Check if X can give change to every person in the Queue

Quick Links :

- 'Practice Problems' on Queue
- 'Videos' on Queue
- 'Quizzes' on Queue

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