

STACK & QUEUE - SET 3 QUESTIONS

Question 1:

- ❖ Problem link: <https://leetcode.com/problems/min-stack/>
- ❖ Difficulty level: Easy
- ❖ Expected Complexity:
 - Time: $O(1)$
 - Extra space: $O(n)$

Question 2:

- ❖ Problem link: <https://leetcode.com/problems/next-greater-element-i/>
- ❖ Difficulty level: Easy
- ❖ Expected Complexity:
 - Time: $O(n)$
 - Extra space: $O(n)$

Question 3:

- ❖ Problem link:
[https://practice.geeksforgeeks.org/problems/3-data-structures/0/?category\[\]=priority-queue&category\[\]=priority-queue&page=1&query=category\[\]priority-queuepage1category\[\]priority-queue](https://practice.geeksforgeeks.org/problems/3-data-structures/0/?category[]=priority-queue&category[]=priority-queue&page=1&query=category[]priority-queuepage1category[]priority-queue)
- ❖ Difficulty level: Easy
- ❖ Expected Complexity:
 - Time: $O(N)$

- Extra space: $O(N)$

Question 4:

❖ **Problem link:**

[https://practice.geeksforgeeks.org/problems/easy-string2212/1/?category\[\]=Stack&category\[\]=Stack&difficulty\[\]=0&page=1&query=category\[\]Stackdifficulty\[\]0page1category\[\]Stack](https://practice.geeksforgeeks.org/problems/easy-string2212/1/?category[]=Stack&category[]=Stack&difficulty[]=0&page=1&query=category[]Stackdifficulty[]0page1category[]Stack)

❖ **Difficulty level:** Easy

❖ **Expected Complexity:**

- Time: $O(|S|)$
- Extra space: $O(1)$

Question 5:

❖ **Problem link:** <https://leetcode.com/problems/design-circular-deque/>

❖ **Difficulty level:** Medium

❖ **Expected Complexity:**

- Time: Each of the operations of the circular deque should take $O(1)$ time.
- Extra space: $O(k)$ $k \rightarrow$ size of circular deque

Question 6:

❖ **Problem link:** <https://leetcode.com/problems/decoded-string-at-index/>

❖ **Difficulty level:** Medium

❖ **Expected Complexity:**

- Time: $O(n)$
- Extra space: $O(1)$

Question 7:

❖ **Problem link:**

[https://practice.geeksforgeeks.org/problems/circular-tour-1587115620/1/?category\[\]=Queue&category\[\]=Queue&difficulty\[\]=1&page=1&query=category\[\]Queueedifficulty\[\]1page1category\[\]Queue](https://practice.geeksforgeeks.org/problems/circular-tour-1587115620/1/?category[]=Queue&category[]=Queue&difficulty[]=1&page=1&query=category[]Queueedifficulty[]1page1category[]Queue)

❖ **Difficulty level:** Medium

❖ **Expected Complexity:**

- Time: $O(N)$
- Extra space: $O(1)$

Question 8:

❖ **Problem link:**

<https://leetcode.com/problems/shortest-subarray-with-sum-at-least-k>

❖ **Difficulty level:** Hard

❖ **Expected Complexity:**

- Time: $O(n)$
- Extra space: $O(n)$