

Reverse First K elements of Queue

Given an integer **K** and a [queue](#) of integers, we need to reverse the order of the first **K** elements of the queue, leaving the other elements in the same relative order.

Only following standard operations are allowed on queue.

- enqueue(x) : Add an item x to rear of queue
- dequeue() : Remove an item from front of queue
- size() : Returns number of elements in queue.
- front() : Finds front item.

Input: 5 3

1 2 3 4 5

Output: 3 2 1 4 5

Explanation: After reversing the given input from the 3rd position the resultant output will be 3 2 1 4 5.

Example 2:

Input: 4 4

4 3 2 1

Output: 1 2 3 4

Explanation: After reversing the given input from the 4th position the resultant output will be 1 2 3 4.

Your Task:

Complete the provided function **modifyQueue** that takes **queue** and **k** as **parameters** and **returns** a **modified** queue. The **printing** is done **automatically** by the **driver code**.

Expected Time Complexity : $O(n)$

Expected Auxilliary Space : $O(n)$

Constraints:

$1 \leq N \leq 1000$

$1 \leq K \leq N$

****Note:****The **Input/Output** format and **Example** given are used for system's internal purpose, and should be used by a user for **Expected Output** only. As it is a function problem, hence a user should

not read any input from stdin/console. The task is to complete the function specified, and not to write the full code.

```
def modifyQueue(q, k):  
    # code here  
    if k == len(q):  
        return q[::-1]  
    # else:  
    #     temp = q[:k][::-1]  
    #     rest = q[k:]  
    #     ans = temp+rest  
    #     return ans  
    stack1 = []  
    stack2 = []  
    for i in range(k):  
        stack1.append(q.pop(0))  
    while stack1:  
        stack2.append(stack1.pop())  
    # stack2 = stack2[::-1]  
    while q:  
        stack2.append(q.pop(0))  
    return stack2
```