239. Sliding Window Maximum

You are given an array of integers `nums`, there is a sliding window of size `k` which is moving from the very left of the array to the very right. You can only see the `k` numbers in the window. Each time the sliding window moves right by one position.

Example 1:

```
Input: nums = [1,3,-1,-3,5,3,6,7], k = 3
Output: [3,3,5,5,6,7]
Explanation:
Window position                Max
------------------            ------
[1  3  -1] -3  5  3  6  7        3
 1 [3  -1  -3] 5  3  6  7        3
 1  3 [-1  -3  5] 3  6  7        5
 1  3  -1 [-3  5  3] 6  7        5
 1  3  -1  -3 [5  3  6] 7        6
 1  3  -1  -3  5 [3  6  7]       7
```

Example 2:

```
Input: nums = [1], k = 1
Output: [1]
```

Constraints:

- `1 <= nums.length <= 10^5`
- `-10^4 <= nums[i] <= 10^4`
- `1 <= k <= nums.length`

Accepted **1M** | Submissions **2.2M** | Acceptance Rate **46.6%**