

```

class Solution {
    public int[] maxSlidingWindow(int[] nums, int k) {
        int len = nums.length;
        if (len < k || k == 0)
            return new int[0];
        Deque<Integer> dq = new ArrayDeque<>();
        int[] res = new int[len-k+1];

        for (int i = 0; i < len; i++) {
            if (!dq.isEmpty() && i - dq.peekFirst() >= k) {
                dq.pollFirst();
            }
            while (!dq.isEmpty() && nums[dq.peekLast()] < nums[i]) {
                dq.pollLast();
            }
            dq.offerLast(i);
            if (i >= k-1) {
                res[i - k + 1] = nums[dq.peekFirst()];
            }
        }
        return res;
    }
}

```