Clarusway

JS-CC-009: Sliding Window Maximum

Assignment Statement

- Time to put your newly learned skills to work!
- This is an interview question asked by Google. 
- Given an array of integers and a number k, where 1 <= k <= length of the array, compute the maximum values of each subarray of length k.

Submit

- Students will push the solutions to their own public GitHub repos.

Learning Outcomes

At the end of the this coding challenge, students will be able to;

- Analyze a problem, identify and apply programming knowledge for appropriate solution.
- Demonstrate their knowledge of algorithmic design principles by using JavaScript and Python effectively.

Expected Outcome

For example;

```
given array = [10, 5, 2, 7, 8, 7] and k = 3, we should get: [10, 7, 8, 8],
since:
10 = max(10, 5, 2)
7 = max(5, 2, 7)
8 = max(2, 7, 8)
8 = max(7, 8, 7)
```

Example 2;

```
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
```

Problem Statement

- Make solution with JS
- Make solution with Python

⏳ Happy Coding ✍