Clarusway

JS-CC-008: 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 ✍