ARRAYS - SET 1 QUESTIONS

Question 1:

- ❖ **Problem link**: https://leetcode.com/problems/maximum-subarray/
- ❖ **Difficulty level**: Easy
- ❖ **Expected Complexity**:
  - ➢ Time: O(n)
  - ➢ Extra space: O(1)

Question 2:

- ❖ **Problem link**: https://leetcode.com/problems/find-n-unique-integers-sum-up-to-zero/
- ❖ **Difficulty level**: Easy
- ❖ **Expected Complexity**:
  - ➢ Time: O(n)
  - ➢ Extra space: O(1)
    (Output array does not count as extra space for space complexity analysis.)

Question 3:

- ❖ **Problem link**: https://leetcode.com/problems/missing-number/
- ❖ **Difficulty level**: Easy
- ❖ **Expected Complexity**:
  - ➢ Time: O(n)
  - ➢ Extra space: O(1)

Question 4:

- ❖ **Problem link**: https://leetcode.com/problems/slowest-key/
- ❖ **Difficulty level**: Easy
- ❖ **Expected Complexity**:
  - ➢ Time: O(n)
  - ➢ Extra space: O(1)

Question 5:

- ❖ **Problem link**: https://leetcode.com/problems/product-of-array-except-self/
- ❖ **Difficulty level**: Medium
- ❖ **Expected Complexity**:
  - ➢ Time: O(n)
  - ➢ Extra space: O(1)
    (Output array does not count as extra space for space complexity analysis.)

Question 6:

- ❖ **Problem link**: https://leetcode.com/problems/beautiful-arrangement-ii/
- ❖ **Difficulty level**: Medium
- ❖ **Expected Complexity**:
  - ➢ Time: O(n)
  - ➢ Extra space: O(1)
    (Output array does not count as extra space for space complexity analysis.)

Question 7:

- ❖ **Problem link**: https://leetcode.com/problems/product-of-the-last-k-numbers/
- ❖ **Difficulty level**: Medium
- ❖ **Expected Complexity**:
  - ➢ Time: O(n)

    (Each 'add' or 'product' operation should take O(1) time
  - ➢ Extra space: O(n)

Question 8:

- ❖ **Problem link**: https://leetcode.com/problems/first-missing-positive/
- ❖ **Difficulty level**: Hard
- ❖ **Expected Complexity**:
  - ➢ Time: O(n)
  - ➢ Extra space: O(n)

Question 9:

- ❖ **Problem link**: https://leetcode.com/problems/median-of-two-sorted-arrays/
- ❖ **Difficulty level**: Hard
- ❖ **Expected Complexity**:
  - ➢ Time: O(n+m)
  - ➢ Extra space: O(n+m)

    ('n' and 'm' are lengths of the two given sorted arrays)

Note: The solution of all these questions will be provided on 4th May, 2021