

# 1096. Maximum Sum of Two Non-Overlapping Subarrays

## Difficulty : Medium

<https://leetcode.com/problems/maximum-sum-of-two-non-overlapping-subarrays>

Given an integer array `nums` and two integers `firstLen` and `secondLen`, return *the maximum sum of elements in two non-overlapping subarrays with lengths `firstLen` and `secondLen`.*

The array with length `firstLen` could occur before or after the array with length `secondLen`, but they have to be non-overlapping.

A **subarray** is a **contiguous** part of an array.

### Example 1:

**Input:** `nums = [0,6,5,2,2,5,1,9,4]`, `firstLen = 1`, `secondLen = 2`

**Output:** 20

**Explanation:** One choice of subarrays is [9] with length 1, and [6,5] with length 2.

### Example 2:

**Input:** `nums = [3,8,1,3,2,1,8,9,0]`, `firstLen = 3`, `secondLen = 2`

**Output:** 29

**Explanation:** One choice of subarrays is [3,8,1] with length 3, and [8,9] with length 2.

### Example 3:

**Input:** `nums = [2,1,5,6,0,9,5,0,3,8]`, `firstLen = 4`, `secondLen = 3`

**Output:** 31

**Explanation:** One choice of subarrays is [5,6,0,9] with length 4, and [0,3,8] with length 3.

### Constraints:

- `1 <= firstLen, secondLen <= 1000`
- `2 <= firstLen + secondLen <= 1000`
- `firstLen + secondLen <= nums.length <= 1000`
- `0 <= nums[i] <= 1000`