1588. Sum of All Odd Length Subarrays

Description

Given an array of positive integers `arr`, return *the sum of all possible **odd-length subarrays** of* `arr`.

A **subarray** is a contiguous subsequence of the array.

Example 1:

```
Input: arr = [1,4,2,5,3]
Output: 58
Explanation: The odd-length subarrays of arr and their sums are:
[1] = 1
[4] = 4
[2] = 2
[5] = 5
[3] = 3
[1,4,2] = 7
[4,2,5] = 11
[2,5,3] = 10
[1,4,2,5,3] = 15
If we add all these together we get 1 + 4 + 2 + 5 + 3 + 7 + 11 + 10 + 15 = 58
```

Example 2:

```
Input: arr = [1,2]
Output: 3
Explanation: There are only 2 subarrays of odd length, [1] and [2]. Their sum is 3.
```

Example 3:

```
Input: arr = [10,11,12]
Output: 66
```

Constraints:

- `1 <= arr.length <= 100`
- `1 <= arr[i] <= 1000`

Follow up:

Could you solve this problem in O(n) time complexity?