312. Burst Balloons

You are given n balloons, indexed from 0 to n - 1. Each balloon is painted with a number on it represented by an array nums. You are asked to burst all the balloons.

If you burst the ith balloon, you will get nums[i - 1] * nums[i] * nums[i + 1] coins. If i - 1 or i + 1 goes out of bounds of the array, then treat it as if there is a balloon with a 1 painted on it.

Return the maximum coins you can collect by bursting the balloons wisely.

Example 1:

- **Input:** nums = [3,1,5,8]
- **Output:** 167
- **Explanation:**
  - nums = [3,1,5,8] --> [3,5,8] --> [3,8] --> [8] --> []
  - coins = 3*1*5 + 3*5*8 + 1*3*8 + 1*8*1 = 167

Example 2:

- **Input:** nums = [1,5]
- **Output:** 10

Constraints:

- n == nums.length
- 1 <= n <= 300
- 0 <= nums[i] <= 100