CODING CHALLENGE

LOOT CAVE

CODER FOUNDRY

DIFFICULTY

DESCRIPTION

You are a Cody Jones, legendary treasure hunter, you have found the mythical treasure island that stores the gold of the famed pirate Captain Flint. You have learned through your exploration of the island that he has stored his gold in a series of loot caves. But with all pirates there is a trap you cannot simply loot each cave. Each cave has a certain amount of gold stashed, but to keep you from looting each of them the caves are connected to an underground lava chamber. If you a loot a cave the adjacent caves are filled with lava. This trap makes the caves impossible to loot.

Given a list of non-negative integers representing the amount of gold of each cave, determine the maximum amount of gold you can loot without dying in the lava.

EXAMPLES

Example 1
Input: nums = [2,1,3,3]
Output: 5
Explanation: loot cave 1 (gold = 2) and then loot cave 3 (gold = 3). Total amount you can loot = 2 + 3 = 5.

Example 2
Input: nums = [2,8,9,4,3]
Output: 14
Explanation: Loot cave 1 (gold = 2), loot cave 3 (gold = 9) and loot cave 5 (gold =3). Total amount you can loot = 2 + 9 + 3 = 14.

Example 3
Input: nums = [8,2,1,9,1,1,9]
Output: 26
Explanation: Loot cave 1 (gold = 8), loot cave 4 (gold = 9), loot cave 7 (gold =9). Total amount you can loot = 8 + 9 + 9 = 26.

Constraints

- 0 <= nums.length <= 100
- 0 <= nums[i] <= 400