

2221. Find Triangular Sum of an Array

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You are given a **0-indexed** integer array `nums`, where `nums[i]` is a digit between `0` and `9` (**inclusive**).

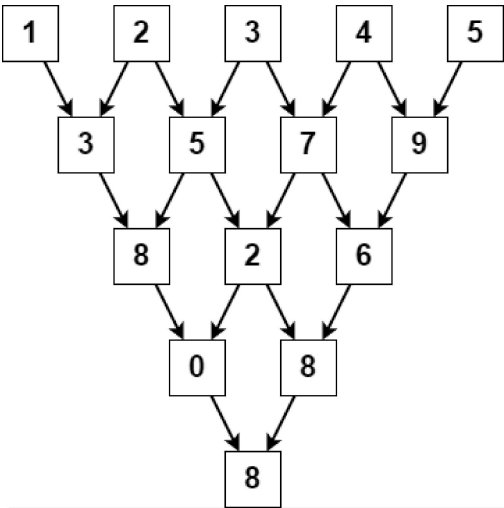
The **triangular sum** of `nums` is the value of the only element present in `nums` after the following process terminates:

- Let `nums` comprise of `n` elements. If `n == 1`, **end** the process. Otherwise, **create** a new **0-indexed** integer array `newNums` of length `n - 1`.
- For each index `i`, where `0 <= i < n - 1`, **assign** the value of `newNums[i]` as $(\text{nums}[i] + \text{nums}[i+1]) \% 10$, where `%` denotes modulo operator.
- Replace** the array `nums` with `newNums`.
- Repeat** the entire process starting from step 1.

Return *the triangular sum of* `nums`.

User Accepted:	7497
User Tried:	7777
Total Accepted:	7681
Total Submissions:	9987
Difficulty:	Medium

Example 1:



Input: `nums = [1,2,3,4,5]`
Output: `8`
Explanation:
The above diagram depicts the process from which we obtain the triangular sum of the array.

Example 2:

Input: nums = [5]
Output: 5
Explanation:
Since there is only one element in nums, the triangular sum is the value of that element itself.

Constraints:

- 1 <= nums.length <= 1000
- 0 <= nums[i] <= 9

Discuss (<https://leetcode.com/problems/find-triangular-sum-of-an-array/discuss>)

 Java



```
1  ▼ class Solution {
2  ▼      public int triangularSum(int[] nums) {
3
4          int length = nums.length;
5
6          if(length == 1)
7              return nums[0];
8
9          for(int i = length; i > 0; i-- ){
10 ▼      for(int j = 0 ; j < i - 1; j++){
11          nums[j] = (nums[j] + nums[j + 1]) % 10;
12      }
13  }
14
15      return nums[0];
16  }
17  }
```

☐ Custom Testcase

Use Example Testcases



Run Code



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United States (/region)