

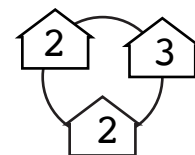
## 213. House Robber II

Medium

You are a professional robber planning to rob houses along a street. Each house has a certain amount of money stashed. All houses at this place are arranged in a circle. That means the first house is the neighbor of the last one. Meanwhile, adjacent houses have a security system connected, and it will automatically contact the police if two adjacent houses were broken into on the same night.

Given an integer array `nums` representing the amount of money of each house, return the maximum amount of money you can rob tonight without alerting the police.

Example 1:

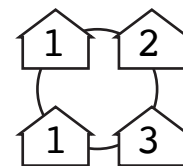


Input: `nums = [2,3,2]`

Output: 3

Explanation: You cannot rob house 1 (money = 2) and then rob house 3 (money = 2), because they are adjacent houses.

Example 2:



Input: `nums = [1,2,3,1]`

Output: 4

Explanation: Rob house 1 (money = 1) and then rob house 3 (money = 3).

Total amount you can rob = 1 + 3 = 4.

Example 3:

Input: `nums = [1,2,3]`

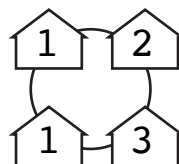
Output: 3

**class Solution:**

```
def rob(self, nums: List[int]) -> int:
    return max(nums[0], self.analysis(nums[1:]), self.analysis(nums[:-1]))
```

```
def analysis(self, nums):
    rob1, rob2 = 0, 0
    for n in nums:
        cache = max(rob1 + n, rob2)
        rob1 = rob2
        rob2 = cache
    return rob2
```

i	0	1	2	3
n				
rob2:	0	1	2	4
rob1 + n:	1	2	4	3
cache:	1	2	4	4
rob1:	0	1	2	4
rob2:	0	1	2	4



i: 0 1 2 3

```
nums[0] = [1]
nums = [1, 2, 3, 1]
nums[1:] = [2, 3, 1]
nums[:-1] = [1, 2, 3]
```

`nums[1:] = [2, 3, 1]`

`nums[:-1] = [1, 2, 3]`

perform the 'house robber' algorithm on two parts of the `nums` list, that either (1) excludes the first number, or (2) excludes the last number