Problem 213: House Robber II

Problem Information

Difficulty: Medium
Acceptance Rate: 0.00%
Paid Only: No

Problem Description

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

Constraints:

1 <= nums.length <= 100

0 <= nums[i] <= 1000

Code Snippets

C++:

```
class Solution {
public:
int rob(vector<int>& nums) {

}
};
```

Java:

```
class Solution {
public int rob(int[] nums) {

}
}
```

Python3:

```
class Solution:
def rob(self, nums: List[int]) -> int:
```

Python:

```
class Solution(object):
def rob(self, nums):
"""
:type nums: List[int]
:rtype: int
"""
```

JavaScript:

```
/**
* @param {number[]} nums
```

```
 * @return {number}
 */
var rob = function(nums) {

};
```

TypeScript:

```
function rob(nums: number[]): number {

};
```

C#:

```
public class Solution {
public int Rob(int[] nums) {

}
}
```

C:

```
int rob(int* nums, int numsSize) {

}
```

Go:

```
func rob(nums []int) int {

}
```

Kotlin:

```
class Solution {
fun rob(nums: IntArray): Int {

}
}
```

Swift:

```
class Solution {
func rob(_ nums: [Int]) -> Int {

}
}
```

Rust:

```
impl Solution {
pub fn rob(nums: Vec<i32>) -> i32 {

}
}
```

Ruby:

```
# @param {Integer[]} nums
# @return {Integer}
def rob(nums)

end
```

PHP:

```
class Solution {

/**
* @param Integer[] $nums
* @return Integer
*/
function rob($nums) {

}
}
```

Dart:

```
class Solution {
int rob(List<int> nums) {

}
}
```

Scala:

```
object Solution {
def rob(nums: Array[Int]): Int = {

}
}
```

Elixir:

```
defmodule Solution do
@spec rob(nums :: [integer]) :: integer
def rob(nums) do

end
end
```

Erlang:

```
-spec rob(Nums :: [integer()]) -> integer().
rob(Nums) ->
.
```

Racket:

```
(define/contract (rob nums)
(-> (listof exact-integer?) exact-integer?)
)
```

Solutions

C++ Solution:

```
/*
* Problem: House Robber II
* Difficulty: Medium
* Tags: array, tree, dp
*
* Approach: Use two pointers or sliding window technique
* Time Complexity: O(n) or O(n log n)
* Space Complexity: O(n) or O(n * m) for DP table
*/
```

```
class Solution {
public:
int rob(vector<int>& nums) {

}
};
```

Java Solution:

```
/**
* Problem: House Robber II
* Difficulty: Medium
* Tags: array, tree, dp
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* Approach: Use two pointers or sliding window technique
* Time Complexity: O(n) or O(n log n)
* Space Complexity: O(n) or O(n * m) for DP table
*/

class Solution {
public int rob(int[] nums) {

}
}
```

Python3 Solution:

```
"""
Problem: House Robber II
Difficulty: Medium
Tags: array, tree, dp

Approach: Use two pointers or sliding window technique
Time Complexity: O(n) or O(n log n)
Space Complexity: O(n) or O(n * m) for DP table
"""

class Solution:
def rob(self, nums: List[int]) -> int:
# TODO: Implement optimized solution
```

```
pass
```

Python Solution:

```
class Solution(object):
def rob(self, nums):
"""
:type nums: List[int]
:rtype: int
"""
```

JavaScript Solution:

```
/**
* Problem: House Robber II
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* Time Complexity: O(n) or O(n log n)
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/**
* @param {number[]} nums
* @return {number}
*/
var rob = function(nums) {

};
```

TypeScript Solution:

```
/**
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```

```
*/

function rob(nums: number[]): number {

};
```

C# Solution:

```
/*
* Problem: House Robber II
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* Approach: Use two pointers or sliding window technique
* Time Complexity: O(n) or O(n log n)
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*/

public class Solution {
public int Rob(int[] nums) {

}
}
```

C Solution:

```
/*
* Problem: House Robber II
* Difficulty: Medium
* Tags: array, tree, dp
*
* Approach: Use two pointers or sliding window technique
* Time Complexity: O(n) or O(n log n)
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*/

int rob(int* nums, int numsSize) {

}
```

Go Solution:

```
// Problem: House Robber II
// Difficulty: Medium
// Tags: array, tree, dp
//
// Approach: Use two pointers or sliding window technique
// Time Complexity: O(n) or O(n log n)
// Space Complexity: O(n) or O(n * m) for DP table

func rob(nums []int) int {

}
```

Kotlin Solution:

```
class Solution {
fun rob(nums: IntArray): Int {

}
}
```

Swift Solution:

```
class Solution {
func rob(_ nums: [Int]) -> Int {

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Rust Solution:

```
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impl Solution {
pub fn rob(nums: Vec<i32>) -> i32 {

}
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```
}
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Ruby Solution:

```
# @param {Integer[]} nums
# @return {Integer}
def rob(nums)

end
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PHP Solution:

```
class Solution {

/**
* @param Integer[] $nums
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