

Problem 1014: Best Sightseeing Pair

Problem Information

Difficulty: **Medium**

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

You are given an integer array

values

where $\text{values}[i]$ represents the value of the

i

th

sightseeing spot. Two sightseeing spots

i

and

j

have a

distance

$j - i$

between them.

The score of a pair (

$i < j$

) of sightseeing spots is

$\text{values}[i] + \text{values}[j] + i - j$

: the sum of the values of the sightseeing spots, minus the distance between them.

Return

the maximum score of a pair of sightseeing spots

.

Example 1:

Input:

$\text{values} = [8, 1, 5, 2, 6]$

Output:

11

Explanation:

$i = 0, j = 2, \text{values}[i] + \text{values}[j] + i - j = 8 + 5 + 0 - 2 = 11$

Example 2:

Input:

$\text{values} = [1, 2]$

Output:

2

Constraints:

$2 \leq \text{values.length} \leq 5 * 10$

4

$1 \leq \text{values}[i] \leq 1000$

Code Snippets

C++:

```
class Solution {
public:
    int maxScoreSightseeingPair(vector<int>& values) {

    }
};
```

Java:

```
class Solution {
    public int maxScoreSightseeingPair(int[] values) {

    }
}
```

Python3:

```
class Solution:
    def maxScoreSightseeingPair(self, values: List[int]) -> int:
```

Python:

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

JavaScript:

```
/**
 * @param {number[]} values
 * @return {number}
 */
var maxScoreSightseeingPair = function(values) {

};
```

TypeScript:

```
function maxScoreSightseeingPair(values: number[]): number {

};
```

C#:

```
public class Solution {
    public int MaxScoreSightseeingPair(int[] values) {

    }
}
```

C:

```
int maxScoreSightseeingPair(int* values, int valuesSize) {

}
```

Go:

```
func maxScoreSightseeingPair(values []int) int {

}
```

Kotlin:

```
class Solution {
    fun maxScoreSightseeingPair(values: IntArray): Int {

    }
}
```

Swift:

```
class Solution {  
    func maxScoreSightseeingPair(_ values: [Int]) -> Int {  
  
    }  
}
```

Rust:

```
impl Solution {  
    pub fn max_score_sightseeing_pair(values: Vec<i32>) -> i32 {  
  
    }  
}
```

Ruby:

```
# @param {Integer[]} values  
# @return {Integer}  
def max_score_sightseeing_pair(values)  
  
end
```

PHP:

```
class Solution {  
  
    /**  
     * @param Integer[] $values  
     * @return Integer  
     */  
    function maxScoreSightseeingPair($values) {  
  
    }  
}
```

Dart:

```
class Solution {  
    int maxScoreSightseeingPair(List<int> values) {  
  
    }  
}
```

```
}
```

Scala:

```
object Solution {  
  def maxScoreSightseeingPair(values: Array[Int]): Int = {  
  
  }  
}
```

Elixir:

```
defmodule Solution do  
  @spec max_score_sightseeing_pair(values :: [integer]) :: integer  
  def max_score_sightseeing_pair(values) do  
  
  end  
end
```

Erlang:

```
-spec max_score_sightseeing_pair(Values :: [integer()]) -> integer().  
max_score_sightseeing_pair(Values) ->  
.
```

Racket:

```
(define/contract (max-score-sightseeing-pair values)  
  (-> (listof exact-integer?) exact-integer?)  
)
```

Solutions

C++ Solution:

```
/*  
 * Problem: Best Sightseeing Pair  
 * Difficulty: Medium  
 * Tags: array, 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 maxScoreSightseeingPair(vector<int>& values) {

}
};

```

Java Solution:

```

/**
 * Problem: Best Sightseeing Pair
 * Difficulty: Medium
 * Tags: array, 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 maxScoreSightseeingPair(int[] values) {

}
}

```

Python3 Solution:

```

"""
Problem: Best Sightseeing Pair
Difficulty: Medium
Tags: array, 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 maxScoreSightseeingPair(self, values: List[int]) -> int:
        # TODO: Implement optimized solution
        pass

```

Python Solution:

```

class Solution(object):
    def maxScoreSightseeingPair(self, values):
        """
        :type values: List[int]
        :rtype: int
        """

```

JavaScript Solution:

```

/**
 * Problem: Best Sightseeing Pair
 * Difficulty: Medium
 * Tags: array, dp
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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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/**
 * @param {number[]} values
 * @return {number}
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var maxScoreSightseeingPair = function(values) {

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```

TypeScript Solution:

```

/**
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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
*/

function maxScoreSightseeingPair(values: number[]): number {

};

```

C# Solution:

```

/*
* Problem: Best Sightseeing Pair
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* Tags: array, dp
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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 MaxScoreSightseeingPair(int[] values) {

    }
}

```

C Solution:

```

/*
* Problem: Best Sightseeing Pair
* Difficulty: Medium
* Tags: array, dp
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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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*/

int maxScoreSightseeingPair(int* values, int valuesSize) {

```

```
}
```

Go Solution:

```
// Problem: Best Sightseeing Pair
// Difficulty: Medium
// Tags: array, 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 maxScoreSightseeingPair(values []int) int {

}
```

Kotlin Solution:

```
class Solution {
    fun maxScoreSightseeingPair(values: IntArray): Int {

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impl Solution {
    pub fn max_score_sightseeing_pair(values: Vec<i32>) -> i32 {

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Ruby Solution:

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# @param {Integer[]} values
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def max_score_sightseeing_pair(values)

end
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PHP Solution:

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class Solution {

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