

Problem 1014: Best Sightseeing Pair

Problem Information

Difficulty: Medium

Acceptance Rate: 62.63%

Paid Only: No

Tags: Array, Dynamic Programming

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:
```