

Problem 447: Number of Boomerangs

Problem Information

Difficulty: Medium

Acceptance Rate: 56.96%

Paid Only: No

Tags: Array, Hash Table, Math

Problem Description

You are given n points in the plane that are all **distinct**, where $\text{points}[i] = [x_i, y_i]$. A **boomerang** is a tuple of points (i, j, k) such that the distance between i and j equals the distance between i and k (the order of the tuple matters).

Return the number of boomerangs.

Example 1:

Input: $\text{points} = [[0,0],[1,0],[2,0]]$ **Output:** 2 **Explanation:** The two boomerangs are $[[1,0],[0,0],[2,0]]$ and $[[1,0],[2,0],[0,0]]$.

Example 2:

Input: $\text{points} = [[1,1],[2,2],[3,3]]$ **Output:** 2

Example 3:

Input: $\text{points} = [[1,1]]$ **Output:** 0

Constraints:

$n == \text{points.length}$ $1 \leq n \leq 500$ $\text{points}[i].\text{length} == 2$ $-104 \leq x_i, y_i \leq 104$ All the points are **unique**.

Code Snippets

C++:

```
class Solution {  
public:  
    int numberOfBoomerangs(vector<vector<int>>& points) {  
  
    }  
};
```

Java:

```
class Solution {  
    public int numberOfBoomerangs(int[][] points) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def numberOfBoomerangs(self, points: List[List[int]]) -> int:
```