

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 `points[i] = [xi, yi]`. 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: 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: points = [[1,1],[2,2],[3,3]] **Output:** 2

Example 3:

Input: points = [[1,1]] **Output:** 0

Constraints:

* `n == points.length` * `1 <= n <= 500` * `points[i].length == 2` * `-104 <= xi, yi <= 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:
```