Problem 149: Max Points on a Line

Problem Information

Difficulty: Hard
Acceptance Rate: 29.80%
Paid Only: No
Tags: Array, Hash Table, Math, Geometry

Problem Description

Given an array of `points` where `points[i] = [xi, yi]` represents a point on the **X-Y** plane, return _the maximum number of points that lie on the same straight line_.

Example 1:

Input: points = [[1,1],[2,2],[3,3]] **Output:** 3

Example 2:

Input: points = [[1,1],[3,2],[5,3],[4,1],[2,3],[1,4]] **Output:** 4

Constraints:

* `1 <= points.length <= 300` * `points[i].length == 2` * `-104 <= xi, yi <= 104` * All the `points` are **unique**.

Code Snippets

C++:

```
class Solution {
public:
int maxPoints(vector<vector<int>>& points) {

}
};
```

Java:

```
class Solution {
public int maxPoints(int[][] points) {

}
}
```

Python3:

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