Problem 1637: Widest Vertical Area Between Two Points Containing No Points

Problem Information

Difficulty: Easy
Acceptance Rate: 87.08%
Paid Only: No
Tags: Array, Sorting

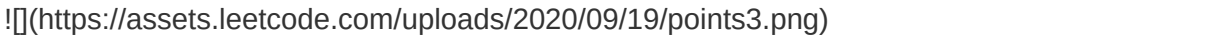
Problem Description

Given `n` `points` on a 2D plane where `points[i] = [xi, yi]`, Return _ the **widest vertical area** between two points such that no points are inside the area._

A **vertical area** is an area of fixed-width extending infinitely along the y-axis (i.e., infinite height). The **widest vertical area** is the one with the maximum width.

Note that points **on the edge** of a vertical area **are not** considered included in the area.

Example 1:



Input: points = [[8,7],[9,9],[7,4],[9,7]] **Output:** 1 **Explanation:** Both the red and the blue area are optimal.

Example 2:

Input: points = [[3,1],[9,0],[1,0],[1,4],[5,3],[8,8]] **Output:** 3

Constraints:

* `n == points.length` * `2 <= n <= 105` * `points[i].length == 2` * `0 <= xi, yi <= 109`

Code Snippets

C++:

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

}
};
```

Java:

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

}
}
```

Python3:

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