You are given a 2D integer array stockPrices where stockPrices[i] = [dayi, pricei] indicates the price of the stock on day dayi is pricei. A **line chart** is created from the array by plotting the points on an XY plane with the X-axis representing the day and the Y-axis representing the price and connecting adjacent points. One such example is shown below:

Chart

Description automatically generated

Return *the****minimum number of lines****needed to represent the line chart*.

**Example 1:**

Chart, line chart

Description automatically generated

**Input:** stockPrices = [[1,7],[2,6],[3,5],[4,4],[5,4],[6,3],[7,2],[8,1]]

**Output:** 3

**Explanation:**

The diagram above represents the input, with the X-axis representing the day and Y-axis representing the price.

The following 3 lines can be drawn to represent the line chart:

- Line 1 (in red) from (1,7) to (4,4) passing through (1,7), (2,6), (3,5), and (4,4).

- Line 2 (in blue) from (4,4) to (5,4).

- Line 3 (in green) from (5,4) to (8,1) passing through (5,4), (6,3), (7,2), and (8,1).

It can be shown that it is not possible to represent the line chart using less than 3 lines.

**Example 2:**

Chart, line chart

Description automatically generated

**Input:** stockPrices = [[3,4],[1,2],[7,8],[2,3]]

**Output:** 1

**Explanation:**

As shown in the diagram above, the line chart can be represented with a single line.

**Constraints:**

* 1 <= stockPrices.length <= 105
* stockPrices[i].length == 2
* 1 <= dayi, pricei <= 109
* All dayi are **distinct**.