

## Valid Square

Medium

Given the coordinates of four points in 2D space, return whether the four points could construct a square.

The coordinate (x,y) of a point is represented by an integer array with two integers.

**Example:**

**Input:** p1 = [0,0], p2 = [1,1], p3 = [1,0], p4 = [0,1]

**Output:** True

Note:

1. All the input integers are in the range [-10000, 10000].
2. A valid square has four equal sides with positive length and four equal angles (90-degree angles).
3. Input points have no order.