

# Problem 612: Shortest Distance in a Plane

## Problem Information

Difficulty: **Medium**

Acceptance Rate: 61.13%

Paid Only: Yes

Tags: Database

## Problem Description

Table: `Point2D`

+-----+-----+ | Column Name | Type | +-----+-----+ | x | int | | y | int |  
+-----+-----+ (x, y) is the primary key column (combination of columns with unique values) for this table. Each row of this table indicates the position of a point on the X-Y plane.

The distance between two points `p1(x1, y1)` and `p2(x2, y2)` is  $\sqrt{(x2 - x1)^2 + (y2 - y1)^2}$ .

Write a solution to report the shortest distance between any two points from the `Point2D` table. Round the distance to **two decimal points**.

The result format is in the following example.

**Example 1:**

**Input:** Point2D table: +---+---+ | x | y | +---+---+ | -1 | -1 | | 0 | 0 | | -1 | -2 | +---+---+  
**Output:** +-----+ | shortest | +-----+ | 1.00 | +-----+ **Explanation:** The shortest distance is 1.00 from point (-1, -1) to (-1, 2).

## Code Snippets

MySQL:

```
# Write your MySQL query statement below
```

**MS SQL Server:**

```
/* Write your T-SQL query statement below */
```

**PostgreSQL:**

```
-- Write your PostgreSQL query statement below
```