Pre-Interview Programming Task

Using your favourite development environment/language (preferably C# or Javascript) please write an application or function which takes a string as input.

The string contains a comma separated list of numbers. Each pair of numbers is the x,y coordinates of a mobile phone mast. The application needs to output the index and coordinates of the pair of masts which are closest to each other.

The distance between 2 sets of coordinates (x1,y1) and (x2,y2) can be calculated as follows :-

Dx = x1-x2
Dy = y1-y2

Distance = Sqrt((Dx * Dx) + (Dy * Dy))

Example:

String Input: "50,50, 54,79, 90,100, 54,60, 10,12, 1,1"

Output: "Tower 0 (50,50) and   Tower 3 (54,60) are closest to each other"