Assignment 1: Collinear points*

csci 3250 Computational Geometry

Describe an algorithm to determine if a set of points in the plane contains a collinear triplet. As usual, we denote the size of the input (in this case the number of points) by n. Your algorithm has to run in $O(n^2 \lg n)$ time and $O(n)$ space.

For full credit your solution has to be clear, neat, concise, and contain at least an attempt to justify why it is correct.

*You are encouraged to work and discuss with a partner, however write your solution individually.