Question: [Convex hull]

Description:

In mathematics, the convex hull of a set **X** of points in the Euclidean plane is the smallest convex set that contains **X**. Formally, the convex hull may be defined as the following rules:

- ➤ The unique minimal convex set containing X.
- ➤ The intersection of all convex sets containing.
- \succ The set if all convex combinations of points in X.
- > The union of all simplexes with vertices in X.

Goal:

Please design an algorithm to find the Minimum Convex Polygon (MCP).

Input:

- 1. Each line has only one point in the form "int x int y".
- 2. Each element of a pair is separated by a space.
- 3. Tests will contain various numbers of points.

 Please be careful of that we won't provide numbers of points.

Output:

- 1. Please output the MCP form the point with minimal value of x-axis anticlockwise.
- 2. Each element of a pair is separated by a space.

Sample Input:

- 2 5
- 3 3
- 2 2
- 1 1
- 3 2
- 3 1
- 4 9
- 4 3
- 3 10

Sample Output:

- 1 1
- 3 1
- 4 3
- 4 9
- 3 10

Illustration:

