## CSCI 338: Quiz 3 (due: Friday, March 19, 8:00pm)

## Your Name:

This is an open-book quiz (not an attendance counting), so you should try your best. After you finish, upload a pdf file on D2L under Quiz-2. A solution will be posted on D2L after the deadline.

## **Problem 1**

Based on the reduction from Sorting to 2D Convex Hull that was covered on March 15, suppose that the input for Sorting are given as  $x_1=4, x_2=-3, x_3=1, x_4=0, x_5=3, x_6=-4, x_7=-2$ .

(1) List the points constructed for the 2D Convex Hull problem. (You must list the coordinates of the points.)

(2) Briefly show how the sorted points  $x_i$ 's are obtained once the 2D convex hull is given.