Spring 1996 **CMSC 754: Homework 3** Samir Khuller

Due in class: Mar 25.

(1) Implement your favorite $O(n \log n)$ convex hull algorithm. Even though Quickhull is not a worst case $O(n \log n)$ algorithm, you may implement it. Find someone who has implemented something different and compare your implementation with theirs (you should find someone who is implementing a different method before implementing your algorithm). Compare the two implementations in terms of correctness and speed. Note that your algorithm should identify the extreme points correctly without making any assumptions about the points (points may all be collinear with the same co-ordinates – your implementation should still work).