CSC-421 Applied Algorithms and Structures
Spring 2021-22

Instructor: Iyad Kanj
Office: CDM 832
Phone: (312) 362-5558
Email: ikanj@cs.depaul.edu
Office Hours (Office/Zoom): Monday 4:40-5:40 & Wednesday 1:00-3:00
Course Website: https://d2l.depaul.edu/

Programming Assignment
(Due April 18)

Problem Description

Write a program that implements Graham's algorithm for computing the convex hull of a set of points S in the plane. Your algorithm should take as input the coordinates of the points in S (following the format in the input files on D2L), and should output the coordinates of the points on the convex hull of S in clockwise/counter-clockwise order. You can assume that the points in S are distinct.

You can use any of the *standard* programming languages, such as C, C^{++}, Java, or Python. Please test your code on the test files that are uploaded on D2L (in the same folder as the assignment), and compare your solutions to the provided solutions (in the same folder as the assignment).

Materials & Remarks

- Please submit all the files that contain your source code. Make sure that the files compile and run.
- The grader will test your programs on the uploaded test files (text files). So make sure that your programs run on the uploaded files.
- Please create a single ".zip" file containing all the above materials and upload it on D2L.