CSC 421 Applied Algorithms and Structures Spring 2019

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Programming Assignment

(Due April 24)

Problem

Program Graham's algorithm for computing the convex hull of a set of points S in the plane. Your algorithm should read its input (i.e., the coordinates of the points in S) from a text file (conforming to the format of the test files on D2L), and should output to the screen the coordinates of the vertices of the convex hull of S. You can assume that the points in S are distinct.

Programming Language

You can use any of the standard programming languages, such as C, Java, or Python.

Material to be submitted on D2L

Submit the files containing your source code. Make sure that your program compiles and runs. The grader will test your program on the uploaded test files (text files); so make sure that your program runs on the uploaded files (i.e., reads its input from the text files). You can input the name of the test file, on which to run your program, from the user.

Please create a single ".zip" file containing all your source files and upload it on $\mathrm{D2L}$.