CSC-421 Applied Algorithms and Structures Spring 2017

Instructor: Iyad Kanj

Office: CDM 832

Phone: (312) 362-5558

Email: ikanj@cs.depaul.edu

Office Hours: Monday 4:40 - 5:40 PM & Wednesday 4:45 - 6:45 PM

Course Website: https://d2l.depaul.edu/

Programming Assignment #1

(Due by May 8)

Implement the algorithm for the closest pair of points (Section 33.4 in the textbook). Your algorithm should input the coordinates of the points in the point-set from a text file whose format matches the test files uploaded on D2L, and output (1) the coordinates of a closest pair in the point-set, and (2) the distance between the two points in the closest pair.

You can use any *standard* programming language $(C, C^{++}, C\#, Java, Python, etc.)$. Please test your code on the test files in D2L (located in the same folder of Dropbox), and compare your solutions to the provided solutions (same folder).

Material to be submitted on D2L

- 1. The files containing your source code. Make sure that the files compile and run.
- 2. 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 material and upload it on D2L.