

ICS 340 Programming Project, Deliverable C

Specification:

Start with your Java program “prog340”, ideally it should be working for Deliverable A and B.

Using Prim’s Algorithm, create a minimum spanning tree of the graph, starting from the node with value “S”. Break ties alphabetically by name. Your graph is guaranteed to be connected.

Print the included edges as well as the total cost of the MST.

As will always be the case in this class, the program must be written in Java and must run on the University Windows computer systems.

Submit the package to the open Deliverable C submission folder.

Output:

Please see the test files and corresponding output files in D2L under Deliverable C/Test Files. Note that Test File c0 is the same graph as the example worked in the slides and Test File c1 is the same graph pictured in the class exercises.

Submit:

Submit your code as an Eclipse package, or submit all the “.java” source files in a zipped archive. Do not include test files.

Grading:

This deliverable is worth 60 points: Correctness will be assessed for 5 files, including both of the test files provided. You will get 10 points for each correct test file and 5 points each for regression testing of Deliverable A and B.

Due Dates:

The program is due on Saturday, March 5th at noon for full credit in the D2L “Deliverable C” dropbox. For a 10-point deduction, you may (re)submit it by noon Saturday, March 12th. The time of submission is the time that D2L lists the file as submitted.