Homework 9 – Due Dec. 10th 23:59, KST

Instructions: Complete the implementation and turn it in before the due date. Any deviations from the instructed deliverable format will result in a deduction of grade. DO NOT COPY OTHER'S WORKS!

You will be implementing the weighted undirected graph data structure for this assignment. See Connectable.java for the interface specification that you should implement. Part of the assignment is understanding the behaviors of the methods given in the Connectable interface, so carefully plan on how you would implement them. You are free to use any data structures we learned in class as long as they're provided by Java's Collection framework. In case you need to build new classes and/or declare other methods, feel free to do so.

Rubric: Grading will be based on, but not limited to, the following criteria.

- Documentation (40 points): For each of the required methods, you should provide extensive descriptions in the header comments. In particular, the descriptions should include logically correct time and space complexity analyses.
- Correctness (60 points): The methods provided by the Connectable interface should behave as specified.
- Miscellaneous: Do not change the method and class names or declare a new package. Any use of recursion will result in 0 credit. You must submit an ***error-free*** program that will compile without any syntax errors. Two or more unexpected exceptions will result in a zero (0) for correctness.

Deliverable: Turn in only the file HW9.java not part of any package structures. We will use our own Collections.java file. Do NOT rename the file and do NOT turn in any other files. You will be penalized for deviating from these instructions.