Discrete Optimization

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1 Instructions for running the data generating program Graphs1

The folder GraphsGeneration contains the following files:

1. Graphs1.java java program source code.

2. Graphs1.class the compiled class file.

3. Tools.class methods used in Graphs1.java

4. compile.bat a batch file that will compile Graphs1.java

5. run.bat a batch file that will run Graphs1.class

6. Sample1.txt an example of a simple graph generated by Graphs1

7. weighted an example of a weighted graph generated by Graph1.

Assumptions: you have the latest JDK (Java development Kit) installed in your computer in the default directry created by the Java installer.

1.1 Running the program.

1. Double click on the icon run.

2. You will be presented with five options:

    a. G-generate a simple graph.

    b. D- generate a directed graph.

    c. W-generate a weighted graph.

    d. A-generate an assignment problem.

    e. T-generate a TSP instance.

3. Make your selection.

4. Enter the size

5. Enter density, the percentage of edges that will be added. For instance, entering 5 will generate an object with about 0.5 of the possible edges. Entering 3 will generate about 0.3 of the deges.

6. Enter name of file: like myexample.txt. Do not forget the file extension that will determine which application can view the file. I use .txt.

7. Select a directory. Either put a complete path such as c:myprograms or just enter . (period) if you want the file to be generated in the same directory as the program.