Objectives:

Gain a better understanding of graphs
Gain a better understanding of Kruskal's algorithm

Instructions:

Get the following class files from the course homepage:

http://cse.sc.edu/~carrollh/csce146/files/DLList.java

http://cse.sc.edu/~carrollh/csce146/files/Graph.java

http://cse.sc.edu/~carrollh/csce146/files/Program.java

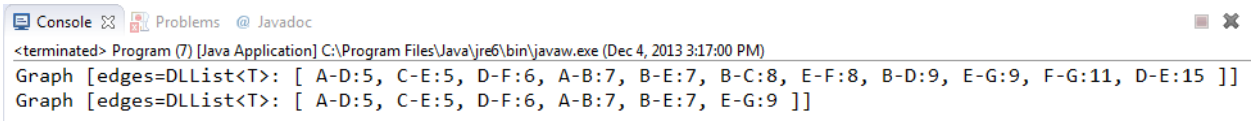
You need to create a project containing these three classes. Your job is to complete the Program.kruskal(Graph graph) method based on the description of the algorithm found here: http://en.wikipedia.org/wiki/Kruskal's_algorithm

The Graph class consists of two nested classes DSNode<T> and Edge. I have hard-coded a sorted implementation of the initial graph shown in the Wikipedia article in the Graph.initialize() method.

DSNode is based of the Disjoint Set data structure described here: http://en.wikipedia.org/wiki/Disjoint-set_data_structure

The only code you need to write is in the Program.kruskal(Graph graph) method. You should leave the rest alone.

Sample output:



Have fun.