## CS 212 MA #4

For this micro assignment, you will use the disjoint set class developed in MA #3 to create a minimum spanning tree using Kruskal's algorithm. In addition, it may be beneficial to reuse some of your MA #2 graph code for this assignment. As always, I've provided an EXE of my solution that you may test against.

## Main.cpp

HackerRank will test your program by supplying one or more vertices in the format

<Source ID> <Sink ID> <Weight>

Note that each data point will be separated by a single space. Here's an example:

125

The following line says that vertex 1 is connected vertex 2 with a edge weight of 5. Therefore, each line represents a single directional edge. If we wanted this edge to be bidirectional, you would have to provide both directions:

125

215

Your main should continue to prompt the user for vertices until it receives the value "-1". After receiving the stop signal, you then must generate a MST. Note that the exact order **is not important** as I can check your output on hacker rank in the case that your order doesn't match mine!

## Grading

Your submission will be judged on the correctness of hacker rank test cases, completeness of code, and quality of code (i.e. style).

## Due Date

This assignment must be submitted through HackerRank no later than <u>midnight</u> on Friday, March 14, 2017.