**CSCI 477 – Games and Game Development**

**Assignment 5**

In this assignment, I implemented a graph structure that is able to do all the graph operations such as initializing a graph, adding a vertex to the graph, adding weights between the vertices and so on.

To be able to make the graph directed, I added each vertex a map that stores the adjacent vertices’ names as keys and the weights as values.

A test driver is implemented to test all the features of the graph. If the GameMap Executable file is launched, it will immediately ask the user to enter a command. In my case, first, I type “INIT” to be able to initialize an empty graph object and then using “ADDV” I add some vertices. Then using “ADDE” I add some edges in between the vertices and using the “PRINT” command, I just see the graph vertices and their adjacent nodes.

Here is a test and its output:

