**CSE 373 Homework 5 Write up**

**Who is in your group (Give name, UW NetID & student number of each person)?**

1. **Describe the worst-case asymptotic running times of your methods** adjacentVertices**,** edgeCost**, and** shortestPath**. In your answers, use |E| for the number of edges and |V| for the number of vertices. *Explain and justify your answers.***

**adjacentVertices() has a cost of O(1), since that is the cost of the get() method of a Java HashMap.**

**edgeCost is O(|E|), because in the worst case all edges must be checked.**

**shortestPath is O(|V|^2)**

1. **Describe how you tested your code.**
2. **If you worked with a partner:   
   a) Describe the process you used for developing and testing your code. If you divided it, describe that. If you did everything together, describe the actual process used (eg. how long you talked about what, what order you wrote and tested, and how long it took).  
     
   b) Describe each group member's contributions/responsibilities in the project.**

**Ryan: Part 1**

**Alyanna: Part 2**

**We both had to debug each other’s codes together and modify parts of it (i.e. adding an extra field to vertex, etc.)**

**c) Describe at least one good thing and one bad thing about the process of working together.**

**Good: Work division.**

**Bad: Keeping consistent with each other’s variable names and clashes in GitHub syncing.**

1. **If you did any above-and-beyond, describe what you did.  
   We did nothing extra.**

**Appendix**

Place anything that you want to add here.