**CSE 373 Homework 1 Write up**

**Your name, UW Net ID and student number:**

1. **How did you test that your stack implementations were correct?**
2. **The file** [**secret.wav**](http://courses.cs.washington.edu/courses/cse373/14sp/homework1/secret.wav) **is a backwards recording of a word or short phrase. Use sox (or another converter) and your program to reverse it, and write that as the answer to this question.**
3. **Your array stacks start with a small array and double in size if they become full. For a .dat file with 1 million lines, how many times would this resizing occur? What about with 1 billion lines or 1 trillion lines (assuming the computer had enough memory)? Explain your answer.**
4. **Suppose that, instead of a DStack interface, you were given a fully-functional FIFO Queue class. How might you implement this project (i.e., simulate a Stack) with one or more instances of a FIFO Queue?  Download** [**QueueStack.java**](http://courses.cs.washington.edu/courses/cse373/14sp/homework1/QueueStack.java) **and** [**FIFOQueue.java**](http://courses.cs.washington.edu/courses/cse373/14sp/homework1/FIFOQueue.java) **and complete the push and pop operation in the QueueStack.java. The FIFO Queue class provides the operations enqueue, dequeue, isEmpty, and size. Turn in a file QueueStack.java.**
5. **In the previous question, what trade-offs did you notice between a Queue implementation of a Stack and your original array-based implementation? Which implementation would you choose, and why?**
6. **Include a description of how your project goes "above and beyond" the basic requirements (if it does).**
7. **What did you enjoy about this assignment? What did you not enjoy? What could you have done better?**
8. **What else, if anything, would you like to include related to this homework?**

**Appendix**

Place anything that you want to add here.