Important

There are a few guidelines you must follow in this homework. If you fail to follow any of the following guidelines you will receive a $\mathbf{0}$ for the entire assignment.

- 1. All submitted code must compile under JDK 7. This includes unused code, don't submit extra files that don't compile. (Java is backwards compatabile so if it compiles under JDK 6 it *should* compile under JDK 7)
- 2. Don't include any package declarations in your classes.
- 3. Don't change any *existing* class headers, constructors, or method signatures. (It is fine to add extra methods and classes)
- 4. Don't import anything that would trivialize the assignment. (e.g. don't import java.util.LinkedList for a Linked List assignment. Ask if you are unsure.)
- 5. You must submit your source code, the .java files, not the compiled .class files.

After you submit your files redownload them and run them to make sure they are what you intended to submit. We are not responsible if you submit the wrong files.

Assignment

This assignment is meant to be an independent research assignment. This means that the answers are not necessarily things we have gone over in class or will go over (But they are related!).

Do not ask the TA's for the solutions, you need to think about how to approach each problem for yourself. (With the solutions given to you most of these problems become relatively easy to code)

It is fine for you to research these problems on the internet and use whatever you can find there. It is not okay to get your solutions from other students, or share them with other students. **Do not post questions on Piazza that blatantly give away the solution to a problem.** Post a private question or go to office hours instead. (It's fine for you to share test cases though)

All of the instructions and restrictions are in the assignment's java docs. You can assume we won't ever pass in null to any of these methods.

Deliverables

You must submit all of the following files.

- 1. Floyd.java
- 2. Lists.java
- 3. Queue.java
- 4. Sort.java

You may attach them each individually, or submit them in a zip archive.