**Java IO Assignments**

1. Write an application that uses DataInputStream, DataOuputStream, serialization. Experiment with transient fields after you write the original application and convince yourself you are using serialization and deserialization. Then add at least one static field and experiment with using transient on a static field. Is this possible, does the file compile and run? Or does it compile, run and then we do not see any effects with respect to serialization?

2. Rewrite the file-copying main program using only the standard java.io classes discussed in class. Assume that appropriate arguments will be provided and no error checking is necessary. Do not handle the possible IOExceptions but simply declare that main may throw an IOException.

3. Copy and modify the previous main program so that it handles all possible IOExceptions and main will not throw any IOException. Output meaningful error message(s)