#### **Streams and Networking**

2-2-2011

## **Opening Discussion**

- Do you have any questions about the quiz?
- Minute essay comments:
  - Import style and efficiency.

# **Saving Drawings**

 I want to start off by finishing the code to save our drawings.

## Networking

- These days, a computer loses a lot of its value if it isn't networked.
- We need to learn how to allow our programs to talk to other computers.
- This can happen in a lot of different ways from just reading information off the machine to having a "dialog" to exchange information.
- Most things we want are in the java.net package.

#### Sockets

- Computers communicate over sockets. They come in two main flavors.
  - TCP This is the default. Does handshaking to determine if messages get through. Reliable, but slower.
  - UDP Throw packets out and hope the other side gets them. Fast, but code has to deal with possible dropped packets.
- One machine acts as a server and waits on a port. Other machines, clients, can connect to that port.

#### **Sockets and Streams**

- Sockets in Java communicate through streams.
  So any code you wrote for file streams can be converted to networking with little to no effort.
- Let's write a simple telnet based chat room first.
- After that we can add either chat or sending drawings to our main program.

## Minute Essay

 How is your project going to be networked? Have you thought of any way that the code style we described here could be challenging to use?