Opening Discussion

- Minute essay comments
  - Making more threads than cores.
- IcP solutions
Java 5 added the java.util.concurrent package and others below it.

Provides better ways to do common tasks for parallel.
Executor

- Use the proper one of these to start threads instead of making them manually.
- Allows Callable[A] and Future[A] which return a value.
Parallel Data Structures

- BlockingQueue
- ConcurrentMap
- CountDownLatch
- CyclicBarrier
- Exchanger
- PriorityBlockingQueue
- Semaphore

Scala provides some support for basic collections.
Locks

- More flexible than synchronized.
- Provides extra power when needed. Particularly for locking across method calls.
Atomics

- Data values with atomic access.
- Faster and easier than doing your own synchronization.
I want to get commands working so that we can play with some of this in the drawing program.
How might you break parts of your project code into different threads to take advantage of many cores?