Announcements

- ## Assignments 5 and 6

  - Assignment 5 due Wednesday night.

  - Assignment 6 out Wednesday night as well, due a week later.

    - Assignment 6 asks you to solve a more difficult multithreading problem.

    - In particular, you'll build a **ThreadPool** class, which exists to manage a constant number of threads that can be scheduled to execute functions on the client's behalf.

    - Instead of creating a new thread for every single function to be executed, the threads initially created are reused to execute more than one function.

- ## Today's Agenda

  - Work through a collection of examples where multithreading where multithreading is used to simulataneously poll all of the myth machines to see which one is best suited for a CS110 student.

  - Work through one final concurrency example so large it deserved its own handout. Look at the latter half of this handout for the full problem description and simulation.

    - This one final program—the ice cream store simulation—illustrates all of the many synchronization patterns in one large (but still manageable) program.

    - Full program can be found right here.

    - Code for ice cream store simulation isn't inlined into the slides, because it's just too big.