## **Computer Science 136**

Data Structures Lecture #14 (October 18, 2021)

## 1. Announcements:

- (a) TA evaluation out this afternoon.
- (b) Lab 4 out tomorrow afternoon.
- (c) We're still grading...
- (d) Questions?
- 2. Cleaning up some final threads on sorting.
  - (a) Instrumenting BubbleSort with a Comparator.
  - (b) Writing a Comparator class.
  - (c) Specifying a *lambda expression* to do the same thing.
  - (d) The stability of sorts:
    - i. A sorting technique is *stable* if it doesn't allow equal values to "pass" each other during the sorting process. Which methods are stable?
    - ii. Is bubble sort stable?
    - iii. Is selection sort stable?
    - iv. Is insertion sort stable?
    - v. Is quicksort stable?
    - vi. Is mergesort stable?
    - vii. Thought question: How might we make an unstable sort stable?

Notes: