CS 314: Data Structures

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Sam's Section

Slides available at: www.cs.utexas.edu/~slaberge

Recursion Assignment

- Y'all did great!

  - Typically only a few failed edge cases

  - Style was also good: magic numbers & naming were the main issues

- Hopefully working with a partner went well. You can choose to work with the same or a different partner for future partner assignments.

Anagrams Assignment

- Complete **and test** the `LetterInventory` class first.

- Get a simple, working solution to the Anagrams problem

  - Apply the recursive backtracking template

- Try getting your solution more efficient

  - Don't generate duplicate anagrams

  - *Virtually* (use a start/end index) shrink your words (see: `nextIsDouble()`)

Anagrams Assignment
Style/Efficiency Reminders

- Make sure your LetterInventory methods are as efficient as possible

  - `toString()` should only really be used for debugging, don't use it to implement other LetterInventory methods.

- You may need to use ArrayList `remove()` at some point, keep in mind that:

```
ArrayList<String> list = new ArrayList<>();
list.add("A"); list.add("B"); list.add("C");

// Remove last element:
list.remove("C");              // O(N)
list.remove(list.size() - 1); // O(1)
```

Section Problem