Chapter 2 outline:

- Mathematical sequences and Python lists (week-before Wednesday)
- Recurrence relations and recursive functions (week-before Friday)
- Functions on lists (last week Monday)
- More functions on lists (last week Wednesday)
- Arrays, vectors, and intervals (last week Friday)
- Review Chapter 1 & 2 (**today**)
- Test on Chapters 1 & 2 (Wednesday)
- (Begin Chapter 3 Friday)

Today:

- General test comments
- Review of topics so far
- Specific test coaching
- How can I help you?

Goals of this course

- Write programs in the functional style
- Think recursively
- Understand sets, relations, and functions so that they can model real-world (and abstract) information
- Use formal logic to prove mathematical propositions.

Concepts of the first two chapters

- Sets and their operations
- Sequences
- Python expressions, types, and functions
- Python sets and lists
- Recursive algorithms

Test content organized by standards:

Standard 1. Verify set equality propositions using Venn diagrams, shading, labeling, and accompanying verbal explanations. *The test will include a section with approximately 2 problems asking you verify a set equality proposition using Venn diagrams.*

Standard 2. Describe a set using set-builder notation. *The test will include a section with approximately 2 problems that ask you two denote a set using set-builder notation.*

Standard 3. Write Python expressions using slicing, negative indexing, and (for arrays) multidimensional indexing. *The test will include a section with approximately 4 problems that ask you to write an expression to index into a list or array.*

Standard 4. Analyze the type of a Python expression. *The test will include a section with approximately 6 expressions for you to type-analyze.*

Standard 5. Write Python functions that use set and list comprehensions. *The test will include a section with approximately 2 problems that ask you to write a function that uses a set or list comprehension.*

Standard 6. Write Python functions that use recursion. *The test will include a section with approximately 2 problems that ask you to write a recursive function.*

For next time:

Study for test...

Read Sections 3.(1-3) for Friday (once you have Chapter 3...)