Outline for December 8, 2020

Reading: *none* **Assignments:** Homework 4, due December 8, 2020

Project, due December 18, 2020

- 1. Thinking recursively [recfun.py]
 - (a) First: think of the problem in terms of something involving a smaller instance of the problem (recursive case)
 - (b) Next: decide when to stop (base case)
 - (c) Example: Find the length of a string
 - (d) Example: Find the maximum element of a list
 - (e) Example: Construct a string from a list of strings
 - (f) Example: Reverse a string
- 2. Recursion
 - (a) Palindromes [palindrome.py]
 - (b) Fibonacci numbers [rfib.py]
 - (c) Sum of digits [sumdigits.py]
 - (d) Nested lists: is an item in a list? [isinlist.py]