Outline for February 22

Assignments: Homework 4, due on March 4 at 11:55pm

1. Binary search
   a. Ordered list only: how it works
   b. Example [search-3c.py]
   c. Recursive [binsearch.py]:
      i. Base case: high < low, return failure; word is list[mid], return mid
      ii. Recursive part: if word < list[mid], search word[low..mid-1]; if word > list[mid], search word[mid+1..high]

2. Putting a program together: Rock, Paper, Scissors
   a. Goal and general algorithm idea
   b. Data representation and program structure
   c. Figure out who wins [rps-prog1.py]
   d. Get computer choice [rps-prog2.py]
   e. Get user input [rps-prog3.py]

3. Putting a program together: Caesar cipher
   a. Problem statement
   b. Design and refinement
   c. Implementation [caesarenc.py, caesardec.py]