
Outline for March 9, 2012

1. Recursion review
2. Example: binary search [*rbinsearch.py*]
 - a. Base case: `high < low`, return failure; `word == list[mid]`, return `mid`
 - b. Recursive part: if `word < list[mid]`, search interval `0 ... mid-1`; if `word > list[mid]`, search interval `mid+1 ... high`
3. Example: Tower of Hanoi [*hanoi.py*]
 - a. The story
 - b. Base case: 1 disk, just move it
 - c. Recursive part: move $n - 1$ disks to second pole, move bottom disk to third, move disks on second pole to third
 - d. Show stack for 3 disks
4. Example: reverse string [*reverse.py*]
 - a. Base case: empty string
 - b. Recursive part: `reverse(s): reverse(s[1:]) + s[0]`