Day 32 Highlights

1. Reminders:
   1. Project Five due today at 5pm
   2. No meeting this Friday
   3. Lab 9 could be posted as early as this Friday
   4. Exam 3 is on April 9, Tuesday
2. Linked lists – today’s focus is ordered add to a list
   * 1. **Create new node**
     2. **Handle special case of empty list**
     3. **Handle special case of inserting at front**
     4. **Find correct location to insert**(7.8x8+5.6x6+3.4x4+1.2x2)
        1. Need an “prev” and “cur” pointer (cur=prev->next, i.e. “prev” is the shadow of “cur”)
        2. “prev” starts at head, “cur” at head->next
        3. Find a position such that prev->degree is bigger, but cur->degree is smaller.
        4. Insert after the “prev” node but before the “cur” node
        5. **Avoid consistence maintenance, just use one pointer.**

**First, instead of using “prev” an “cur”, use “cur” and “next”. Second, “next” is cur->next. Just use one pointer which is “cur”.**

* + - 1. **What if cur points to last node (cur is not NULL, but cur->next is NULL)?**
    1. **Write a comparison function**

int compareTerms(Term \*pNew, Term \*pExisting);