

## HW#4

1. **Exercise 4-2 (Pg 139).** Recall that sorting can be solved in worst case  $O(n \log n)$  time.
2. **Exercise 4-6 (Pg 140).**
3. **Exercise 4-12 (Pg 140).** Use heaps!
4. **Exercise 4-29 (Pg 142).** Proof by contradiction. Assume Mr. Dull is correct and show that this leads to an incorrect assertion. (Assume Mr. Dull's data structure uses comparisons.)
5. **Exercise 4-33 (Pg 143).** If it helps, I think this is a tough problem!