

**Homework : Greedy****Problems**

1. (15 pts) Exercise 15.2-3. Use induction to argue correctness.
2. (15 pts) Exercise 15.2-4.
3. (15 pts) Exercise 15.2-5.
4. (15 pts) Exercise 15.2-6.
5. (15 pts) Exercise 15.3-3.(Extra Credit). First prove by induction that  $\sum_{i=0}^{n-1} F(i) = F(n+1) - 1$
6. (20 pts) Problem 15-1, (a), (b) and (c).
7. (15 pts) Exercise 14.4-5. Hint: try to solve this problem using a greedy approach - it may not work; if it doesn't work, it means you must use DP and you can leave it for HW5.