Introduction To Algorithms
CS430

Spring 2013
HomeWork 6
Due 4th March

1. **Problem 1:** Problem 13-3 (Pg 333) CLRS(3rd Edition).

   (20)

2. **Problem 2:** Implement 2-4 Trees (Due on 11th March) (40)

3. **Problem 3:** In chained Hashing (where collisions are resolved by adding keys into a linked list), suppose the linked list is replaced by a red-black tree. Determine the expected time for successful and unsuccessful search. (20)

4. **Problem 4:** Suppose the hash function $[h_1(k) + ih_2(k)] \mod m, i = 0, 1, ..$ repeats a location at the jth step, $j < m$. Will the hashing function generate m different locations. (20)