

CPSC 332 File Structures and Database Systems

Homework #5 (due Dec 4 before 11:59pm)

Instructor: Dr. Shawn Wang

Please write the last 4 digits of your campus wide ID on the front page of your homework.

- Suppose you have these inputs: M, I, T, Q, L, H, R, E, K, P, C, A.
 - Show the binary search tree for these inputs.
 - Show how to store the binary search tree in an array with the node structure (key, left, right).
- Show the B+-tree of order three (namely each node has a maximum of three keys/descendents) that result from loading the following sets of keys in order:
 - M, I, T
 - M, I, T, Q, L, H, R, E, K
 - M, I, T, Q, L, H, R, E, K, P
 - M, I, T, Q, L, H, R, E, K, P, C, A
- Show the trees that result after each of the keys N, T, H, and Y is deleted individually and separately from the following B+-tree. Do not delete the keys based on the results you got. Each key should be deleted from the original tree.

