

## Honors Problem4: Binary Search Trees

Your task is to study and implement Binary Search Trees from scratch (no tree library allowed)

part A. Decide on a tree structure: either use an array representation where indices handles tree nodes, or a pointer representation between tree objects

part B. Write Pseudocode for Insertion, Deletion, Successor, Predecessor, Search. For each of them analyze informally the run time.

part C. Implement all five the above procedures with your favorite programming language

part D Optional. Study Red-Black trees (Cormen et al Ch 13) and implement the necessary mechanisms to enforce a balanced tree after each procedure.