Data Structures using C++

Assignment II

Note 1. Source code has to be thoroughly documented

2. Use Templates

1. Implement the following searching techniques
    a. Sequential Search
    b. Binary Search
2. Implement Selection Sort, Bubble Sort, Insertion Sort, Quick Sort, Merge Sort and Heap sort algorithms.
3. Create a hash table of size 11 which maintains keys of integer type. Resolve the collisions using separate chaining. Also include functionality to print the elements hashed into each of the slot in hash table.
4. Construct Binary Search Tree (BST) ADT class and include functionality to insert an element, delete an element, inorder traversal, preorder traversal, postorder traversal, mirror image of BST, height of BST, count number of nodes of BST and level-wise ordering of BST.
5. Given Inorder and preorder sequences of a binary tree, construct the binary tree.
6. Implement file system using trees