Upload link: https://www.dropbox.com/l/AAAAtb7YqKdoUc74q3-lKzv449VQ9JTcqeo

Data Structures Lab

Assignment: 5

1. Write a C++/JAVA program which uses a Binary Search Tree to store character strings, and has a menu with the following options:

   Read String: which asks the user for a character string, and stores the character string in the Binary Search Tree.

   List: which prints out all the character strings stored in the Binary Search Tree in alphabetical order.

   Quit: which allows the user to quit the menu and exit the program.

2. Modify your above C++/JAVA program you wrote for the preparation to have the following:

   Read File: which asks the user for a filename, opens the file, and stores all the character strings in the file in the Binary Search Tree.

   Search: which asks the user for a character string, and then prints a message indicating whether or not the string is contained in the Binary Search Tree.

   List: which prints out all the character strings stored in the Binary Search Tree in alphabetical order.

   Quit: which allows the user to quit the menu and exit the program.

3. Write a program to find the k^{th} smallest/largest element in a given BST.