

## Design document

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Csc 130

1. This program is going to continually prompt the user for weather or not they want to add a node, delete a node, show the inorder transversal of the binary tree , or exit.
2. The switch statement in the main allows us to take user input, taken by the readline. We then constructed a BSTree class to allow us to
  - a. Add nodes via the insertBST method
  - b. Delete nodes via the removeBST method, if there is a node to delete
  - c. Then to print it out we call the inorder method which sorts the nodes and then prints them
3. Each method described above would have sub methods to check
  - a. If the value provided was greater or less than the previous ones for InsertBST, and then either have it take the current spot or have it taken the other values spot and increment forward to the next location
  - b. RemoveBST is called recursively until the node is found then removeFoundNode checks mto see if the node is deleted and then procedes to go through varoise checks to see hwo to delete it
  - c. inOrder is called recursively until it goes through the entire tree.
4. This entire program was provided by the reference sheet for assignment 2 on black board.

Sample run\_\_\_\_\_

Input : 15, 5, 3, 12, 10, 6, 7, 13, 16, 20, 18, 23

Output: The inorder Traversal of BST Tree is:

3  
5  
7  
10  
12  
13  
15  
16  
18

2

23