

BINARY SEARCH TREE PROBLEMS

Using BST data structure for implementing a Book Management in Java language.

Information about book includes:

- bcode (string): the code of the book
- title (string): the book title
- price (double): the price of book (which is a **key** of the tree)

YOUR TASK: Build MyTree class as a BST of Book objects, with the following methods:

1. **void insert(String xCode, String xTitle, double xPrice)** – insert a new book to the tree.
2. **void traverse()** - Display all nodes with level by pre-order traverse to the output screen. Each node will be in one line with the format:

(bcode, title, price, level)
3. **String maxPrice()** – return the book title having maximum price.
4. **void deleteMinPrice()** – delete the book having minimum price.
6. **int count()** – return the number of the books in the tree.
7. **int height()** – return the height of the tree
8. **void searchTitle()** – find all the nodes having 2 sons and height < 5 and display the book title of those nodes by post-order traverse, each title is in one line.