

Ordering items

→the program allow users the ability to order items from a supermarket online. The Item consists of three attributes and Read the items from a file.

- Item Name
- It's category
- Item price

→For the Item creation, there an item class where objects are part of the node which will form the non-linear trees. In other terms, the program is made up of three tree data structures which are 1 binary search tree, 2 heaps and 3 avl and they are all node-based.

→The program implements the three tree data structures as following:

1) A Menu that allow user to choose which non linear structure:

- i. Binary Search Trees (BST)
- ii. Heaps
- iii. AVL Trees

2) Each tree have its own mini menu:

The mini-menu has all the operation that are applied the tree structures:

- I. Add item data,
- II. Remove item data,
- III. Display the item data normally
- IV. Display all the items sorted by their name ascending
- V. Display all the items sorted by their name

descending,

VI. Display all the items sorted by their prices

ascending

VII. Display all the items sorted by their prices

descending.