CENG 202 Data Structures

Lab 4 Questions: Doubly Linked Lists

Aim: Implement some functions for Doubly Linked List data structure.

Cell phones are **forbidden**. Please put your cell phones in your bags.

You **can't leave** class early unless you finished the tasks.

You can **download** Test.java file. You have the linklist structure below and you will be implemented the following functions for *DoublyLinkList*:

- displayBackward()
  - The method displays the link list from tail to the head of link list.
- insertLast(int num)
  - The method adds the number to the end of link list as a new node.
- deleteFirst()
  - The method deletes the first node of the list.
- sortedInsert()
  - The method adds the nodes in an ascending ordered way.
- deleteDuplicateValues()
  - The method deletes the duplicate values in the link list.

Output should be

```
List (tail-->head): 22
List (tail-->head): 44 22
List (tail-->head): 66 44 22
List (tail-->head): 66 44
List (tail-->head): 66
List (tail-->head):
List (head-->tail): 8
List (head-->tail): 6 8
List (head-->tail): 2 6 8
List (head-->tail): 2 4 6 8
List (head-->tail): 2 4 5 6 8
List (head-->tail): 2 4 5 6 8 9
List (head-->tail): 2 4 5 6 8 9 9
List (head-->tail): 2 4 5 5 6 8 9 9
List (head-->tail): 2 4 4 5 5 6 8 9 9
List (head-->tail): 2 4 4 4 5 5 6 8 9 9
List (head-->tail): 2 4 4 4 5 5 6 8 9 9 9
List (head-->tail): 2 4 5 6 8 9
```