IT206 Midsem exam

Problem: Write a program to firstly create two sorted doubly linked lists of integers and then unite them into one single sorted doubly linked list. You should not create any new nodes when combining the two sorted lists into a single one. After creating the combined sorted doubly linked list, write code to allow inserts and deletes in the sorted list.

Sample Run: (the inputs given by the user are shown in red)

Enter the size of the first doubly linked list: 3
Enter the elements in the first list:
10
4
6
The elements in the first sorted doubly linked list are:
4 6 10
Enter the size of the second doubly linked list: 2
Enter the elements in the second list:
12
7
The elements in the second sorted doubly linked list are:
7 12
The elements in the combined and sorted doubly linked list are:
4 6 7 10 12

Menu options:
1. Insert an element
2. Delete an element
3. Exit
Enter your choice: 2
Enter the element to be deleted: 10
Element succesfully deleted. New list is:
4 6 7 12

Menu options:
1. Insert an element
2. Delete an element
3. Exit
Enter your choice: 1
Enter the element to be inserted: 5
Element succesfully inserted. New list is:
4 5 6 7 12

Menu options:
1. Insert an element
2. Delete an element
3. Exit
Enter your choice: 3
Exiting program.