

```
1 // linked_list.cpp
2 //
3 #ifndef _WIN32
4     #include <tchar.h>
5     #include <conio.h>
6 #elif (defined __linux__) || (defined _AIX)
7     typedef char _TCHAR;
8     #define _tmain main
9 #endif
10
11 #include <stdio.h>
12 #include <iostream>
13 using namespace std;
14
15 #include "LinkedList2.h"
16
17 void my_getch();
18 //-----
19 int _tmain(int argc, _TCHAR* argv[])
20 {
21     int choice, data;
22     TList* integerList = new TList();
23
24     cout << "\nEnter one of the following:" << endl
25         << " 1 to insert at beginning of list" << endl
26         << " 2 to insert at end of list" << endl
27         << " 3 to delete from beginning of list " << endl
28         << " 4 to delete from end of list " << endl
29         << " 5 to sort in the order from the smallest to the biggest" << endl
30         << " 6 to insert in the order from the smallest to the biggest" << endl
31         << " 7 to end list processing" << endl << endl;
32
33     do {
34         do {
35             cout << "? ";
36             cin >> choice;
37         } while (choice < 1 || choice > 7);
38
39         switch (choice) {
40             case 1:
41                 cout << "Enter an integer : ";
42                 cin >> data;
43                 integerList->insertAtFront(data);
44                 integerList->print();
45                 break;
46             case 2:
47                 cout << "Enter an integer : ";
48                 cin >> data;
49                 integerList->insertAtBack(data);
50                 integerList->print();
51                 break;
52             case 3:
53                 if (!integerList->isEmpty()) {
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54         if (integerList->removeFromFront(data))
55             cout << data << " removed from list" << endl;
56         integerList->print();
57         break;
58     }
59     case 4:
60         if (!integerList->isEmpty()) {
61             if (integerList->removeFromBack(data))
62                 cout << data << " removed from list" << endl;
63             integerList->print();
64         }
65         break;
66     case 5:
67         integerList->sortElements();
68         integerList->print();
69         break;
70     case 6:
71         cout << "Enter an integer : ";
72         cin >> data;
73         integerList->insertBeforeElement(data);
74         integerList->print();
75         break;
76     default: break;
77 }
78 } while (choice != 7);
79
80 delete integerList;
81
82 my_getch();
83 return 0;
84 }
85 //-----
86 void my_getch()
87 {
88 #ifdef _WIN32
89     _getch();
90 #else
91     cout << endl;
92 #endif
93 }
94 //-----
95
```