```cpp
1 /*****************************************************************************
2 * AUTHOR     : Amirarsalan Valipour & Ali Eshghi
3 * STUDENT ID : 1103126 - 1112261
4 * LAB #10    : Creating an Ordered List
5 * CLASS      : CS 1B
6 * SECTION    : MW - 7:30 pm
7 * DUE DATE   : 11/05/2019
8 *****************************************************************************/
9
10
11 #include "MyHeader.h"
12
13 /*****************************************************************************
14 * LAB 10
15 * -------------------------------------------------------------------------
16 * This program gets an integer as an option from the user based in the printed
17 * menu. the first option gets the data from an input file and put the data into
18 * the content of nodes and add them to an empty list that has been created in
19 * main. the second option displays the list that has been created in the
20 * first option of the menu on the screen. the second option runs a function that
21 * determines that the list created or modified by the user is empty or no, and
22 * it outputs on the screen if the list is empty or no. the fourth option let the
23 * user to search the nodes based on the name content of the nodes and if the
24 * name content of a node matches the name content of the searched name by the
25 * user, it shows every content of the node.the fifth option will ask the user
26 * which node the user wants to remove and it searches the nodes based on the
27 * name content of the nodes and if the name content of a node matches the name
28 * input by the user, the function removes the node from the list, if not, the
29 * function outputs that the name searched by the user has not found in the list.
30 * the sixth option This function Allows the user to delete all the nodes in the
31 * linked list and make an empty list out of the list of the names that we had.
32 * -------------------------------------------------------------------------
33 * INPUT  : option      -> menu option
34 * -------------------------------------------------------------------------
35 * PROCESS: creating the list
36 *          Displaying the list
37 *          Check if the list is empty
38 *          Searching by the name
39 *          searching and removing a name
40 *          clearing the list
41 *
42 *
43 * -------------------------------------------------------------------------
44 * OUTPUT : Content of the nodes
45 *          Information about the list based on the creating and modifying
46 *****************************************************************************/
47
48
49 int main()
50 {
51     /*************
52      * VARIABLES *
53      *************/
54
55     int  menuOption;  // IN - user input
```

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56        PersonNode *head; // PROCESS - pointer for an empty list
57
58        //creating an empty list
59        head = NULL;
60
61
62
63        //This function outputs the class heading
64        PrintHeaderFile();
65
66
67        // GETS USER INPUT AND CHECK IT
68
69        //This function will output menu option to the screen and waits for the user
70        //to input an option to what to what to do.
71        menuOption = PrintMenu();
72
73        while (menuOption != 0)
74        {
75            if (menuOption == 1)
76            {
77                cout << endl;
78
79                 //This function will get the data from the input file and puts the
80                 //data into the contents of the nodes, then add the nodes to the
81                 //empty lists passed by Reference to the function
82                CreatList(head);
83            }
84
85            else if (menuOption == 2)
86            {
87                 //This function will output the contents of the nodes of the linked
88                 //list created in the CreatList function
89                DisplayList(head);
90            }
91
92            else if (menuOption == 3)
93            {
94                 //This function check if the list created or modified by the user
95                 //is empty or no and then  outputs if the list is empty or no
96                IsEmpty(head);
97            }
98
99            else if (menuOption == 4)
100            {
101                 //This function will get a name from the user and search the name
102                 //content of each node to see if there is a matching name in the
103                 //nodes with the name searched by the user.
104                SearchName(head);
105            }
106
107            else if (menuOption == 5)
108            {
109                 //This function will ask the user which node the user wants to
110                 //remove and it searches the nodes based on the name content of the
```

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111                 //nodes and if the name content of a node matches the name input by
112                 //the user, the function removes the node from the list,
113             RemoveNode(head);
114
115         }
116
117         else if (menuOption == 6)
118         {
119             //This function Allows the user to delete all the nodes in the
120             //linked list and make an empty list out of the list of the names
121             //that we had
122             ClearList(head);
123         }
124
125         // GETS USER INPUT AND CHECK IT
126
127         menuOption = PrintMenu();
128     }
129
130 }
131
132
133
```