```cpp
/*************************************************************
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* LAB #13       : LAB 13 - ARRAYS AND LINKED LIST (OOP)
* CLASS         : CS 1B
* SECTION       : MW - 7:30 pm - 9:50 pm
* DUE DATE      : 12/3/2019
*************************************************************/
#include "MyHeader.h"
#include "Classheader.h"

/*************************************************************
 * LAB 13 - ARRAYS AND LINKED LIST (OOP)
 *_____________________________________________________________
 * This program will use the arrays and linked list as an
 * objects of a class and gets the information base of the
 * users choice and add those information to the list and
 * prompts a menu for the user who can have more options
 *_____________________________________________________________
 * INPUT:menuOption -> user input for the menu
 *       name       -> name of a new sheep
 *       age    -> age of a new sheep
 *
 *
 * OUTPUT:name      -> name of the sheeps in the list
 *        age       -> age of the sheeps in the list
 *        size      -> how many sheeps are in the list
 *        search-> user input name to search in the list
 *        if the list is empty or no
 *************************************************************/

int main()
{

    /*************
     *  VARIABLE *
     *************/
    int     menuOption;
    Animal  sheep;
    string  name;
    string  search;
    int     age;
    int     size;


    //this function will output the class header
    PrintHeader();



    cout << "*************************************" << endl;
    cout << "* WELCOME TO THE SHEEP LIST MANAGER *" << endl;
    cout << "*************************************" << endl << endl;

    //do while loop for menu
```

```
56      do
57      {
58          //this function prompts the user the menu and gets the user input
59          menuOption = Menu();
60
61
62          //first option that adds the sheep to the menu
63          if(menuOption == 1)
64          {
65              cin.ignore(10000,'\n');
66              cout << "Sheep name: ";
67              getline(cin,name);
68              cout << "Sheep Age:  ";
69              cin  >> age;
70
71              sheep.AddSheep(name, age);
72              sheep.AddSheepLinkedList(name, age);
73          }
74
75          //second option that displays the first sheep in the list
76          else if(menuOption == 2)
77          {
78              sheep.DisplayFirstSheep();
79          }
80
81          //third option that searches for a specific sheep
82          else if(menuOption == 3)
83          {
84              cin.ignore(10000,'\n');
85              cout << "Who are you looking for? ";
86              getline(cin,search);
87              sheep.FindSheep(search);
88          }
89
90          //fourth option that outputs how many sheeps are in the list
91          else if(menuOption == 4)
92          {
93              size = sheep.ListSize();
94              cout << "There are " << size << " sheeps in the list"
95                                   << endl << endl;
96          }
97
98          //fifth option that displays the members of the list
99          else if(menuOption == 5)
100         {
101             sheep.Display();
102
103             size = sheep.ListSize();
104             cout << "There are " << size << " sheeps in the list"
105                                  << endl << endl;
106         }
107
108         //sixth option that clears the list (deconstruction)
109         else if(menuOption == 6)
110         {
```

```
111             sheep.~Animal();
112 
113         }
114 
115 
116     }while(menuOption != 0);
117 
118 
119     return 0;
120 
121 
122 }
123 
```