```
#include <iostream>
#include "vehicle.h"
#include "manager.h"
using namespace std;
void mainMenu(manager man1); ///Function declarations
int main() ///Main
{
  manager manager1;
  mainMenu(manager1); ///Run main menu function using manager1
  return 0;
}
void mainMenu(manager man1)
  int mainSentinal = 2;
 int editSentinal = 7;
  string editString = " ";
 int editNum = 0;
 int vehicleIndexEdit = 0;
  int number_of_trucks = 0; ///Variables
 while(man1.getGenerated()!= true && mainSentinal!= 4) ///While loop that generates the array of
vehicles
 {
    cout << "Possible Actions" << endl << endl;</pre>
    cout << "Generate Vehicles List (1)" << endl;</pre>
    cout << "Exit
                         (4)" << endl << endl;
```

```
cout << "Please enter your action (1 or 4): ";</pre>
    cin >> mainSentinal;
   if(mainSentinal == 1) ///If statements that read user input and either generate the list, exit the
program, or prompt the user to enter the value again
   {
     cout << "Please enter the number of trucks out of 200 vehicles: ";
     cin >> number_of_trucks;
     man1.generateInfo(number_of_trucks);
     man1.setGenerated(true);
   }
   else if(mainSentinal == 4)
   {
     cout << "Goodbye!";
   }
    else if(mainSentinal != 1 && mainSentinal != 4)
   {
     cout << "That is not a valid option. Please try again!" << endl;</pre>
   }
 }
 while(man1.getGenerated() == true && mainSentinal != 4) ///While loop containing Edit Mode, the
print vehicles action, and the exit action
 {
   cout << "Possible Actions" << endl << endl;</pre>
   cout << "Edit List
                           (2)" << endl;
    cout << "Print Vehicles (3)" << endl;
    cout << "Exit
                          (4)" << endl << endl;
    cout << "Please enter your action (2, 3, or 4): ";
   cin >> mainSentinal;
   if(mainSentinal == 2) ///Edit mode
```

```
{
  while(editSentinal!=0) ///Allows the user to enter the index and what they would like to edit
  {
    cout << "EDIT MODE" << endl;</pre>
    cout << endl << "Type (1)" << endl << "Age (2)" << endl << "Length (3)" << endl
    << "Width (4)" << endl << "Max Speed (5)" << endl << "Exit (0)" << endl << endl;
    cout << "Field to change: ";
    cin >> editSentinal;
    if(editSentinal == 0) ///Ends edit mode if the user enters 0
   {
      cout << "EDIT MODE ENDED" << endl;
      mainSentinal = 1;
      break;
   }
    if(editSentinal > 6)
      cout << "That is not a valid input. Please try again." << endl;</pre>
   }
    while(editSentinal == 1) ///Allows the user to change the vehicle type
   {
      cout << "Enter the index of the vehicle you would like to edit (0 - 199): ";
      cin >> vehicleIndexEdit; ///Reads in the index of the information the user wants to edit
      cout << "What would you like to change the vehicle type to?" << endl;</pre>
      cin >> editString;
      if(editString == "Truck" || editString == "Car")
      {
        man1.setArrayType(vehicleIndexEdit, editString);
        editSentinal = 7;
      }
```

```
else
  {
    cout << "Sorry, that is not a valid input. Please try again" << endl;</pre>
  }
}
while(editSentinal == 2) ///Allows the user to change the vehicle age
{
  cout << "Enter the index of the vehicle you would like to edit (0 - 199): ";
  cin >> vehicleIndexEdit; ///Reads in the index of the information the user wants to edit
  cout << "What would you like to change the vehicle age to?" << endl;
  cin >> editNum;
  if(editNum >= 1 && editNum <= 20)
  {
    man1.setArrayAge(vehicleIndexEdit, editNum);
    editSentinal = 7;
  }
  else
    cout << "Sorry, that is not a valid input. Please try again" << endl;</pre>
  }
}
while(editSentinal == 3) ///Allows the user to change the vehicle length
{
  cout << "Enter the index of the vehicle you would like to edit (0 - 199): ";
  cin >> vehicleIndexEdit; ///Reads in the index of the information the user wants to edit
  cout << "What would you like to change the length of the vehicle to?" << endl;
  cin >> editNum;
  if(editNum >= 3 && editNum <= 8)
  {
```

```
man1.setArrayLength(vehicleIndexEdit, editNum);
    editSentinal = 7;
  }
  else
  {
    cout << "Sorry, that is not a valid input. Please try again" << endl;</pre>
  }
}
while(editSentinal == 4) ///Allows the user to change the vehicle width
{
  cout << "Enter the index of the vehicle you would like to edit (0 - 199): ";
  cin >> vehicleIndexEdit; ///Reads in the index of the information the user wants to edit
  cout << "What would you like to change the width of the vehicle to?" << endl;
  cin >> editNum;
  if(editNum >= 1 && editNum <= 3)
    man1.setArrayWidth(vehicleIndexEdit, editNum);
    editSentinal = 7;
  }
  else
  {
    cout << "Sorry, that is not a valid input. Please try again" << endl;
  }
}
while(editSentinal == 5) ///Allows the user to change the vehicle max speed
{
  cout << "Enter the index of the vehicle you would like to edit (0 - 199): ";
  cin >> vehicleIndexEdit; ///Reads in the index of the information the user wants to edit
  cout << "What would you like to change the maximum speed of the vehicle to?" << endl;
```

```
cin >> editNum;
         if(editNum >= 120 && editNum <= 200)
           man1.setArrayMS(vehicleIndexEdit, editNum);
           editSentinal = 7;
         }
         else
         {
           cout << "Sorry, that is not a valid input. Please try again" << endl;</pre>
         }
       }
     }
   }
   if(mainSentinal == 3) ///Prints the vehicle information list
   {
     man1.printVehicleInfo();
   }
 }
}
```