The following are the details for each of your menu options:

1. Read Dealers and Cars from file
2. Display Dealers
3. Choose a Dealer Number, Display Cars
4. Choose a Dealer Number, Add Car
5. Choose a Dealer Number, List Cars and Modify a Car
6. Choose a Dealer, Sort cars by VIN (EXTRA CREDIT)
7. Write Dealers and Cars to file (EXTRA CREDIT)
8. Exit

1. (option 1) Read Dealers and Cars from file
Pass the vector of dealers (from main) into the function by reference.
`readDealers(ifstream &infile, vector<Dealer> &dealers)`

Each Dealer will have a name and number followed by the number of cars in the dealership (on separate lines). Then you will read in a Vin, Make, Model, Year and Price for each car (on separate lines). You can assume that the number of cars as well as the Vin, Make, Model, Year and Price will be complete for each car. Each dealer can have more than one car.

2. (option 2) Display Dealers
Pass the **vector** of dealers (from main) into the function by reference.
`displayDealer (vector<Dealer> &dealers)`
Display the Dealer Name and Number for each dealer (put a blank line between dealers). Use the << operator with cout (cout << dealer[x];)

3. (option 3) Choose a Dealer Number, Display Cars
Pass the vector of dealers (from main) into the function by reference.
`displayCar ( vector<Dealer> &dealers)`

Display the Dealer Names and Numbers (menu #2).
Ask the user for the dealer number, display all of the cars by using a for loop (from zero to size of the car array) using the << operator with cout
Tip: when show the car show the index+1 where the car is inside the dynamic array
`cout << dealer[x].carArrayPtr[x];`

4. (option 4) Choose a Dealer Number, Add Car
Pass the vector of dealers (from main) into the function by reference.
`AddCar ( vector<Dealer> &dealers)`
a) Display the Dealer Names and Numbers (menu #2).
b) Ask the user for the dealer number then the new car information.
Follow the steps found in CSCI 1411 Lab 09 to increase the dynamic array. (Essentially you will make a new array, one bigger than the previous car array. Then you will copy everything over from the old car array to the new one. Then you will point the car pointer to the new array)

5. Choose a Dealer Number, List Cars and Modify a Car

Pass the vector of dealers (from main) into the function by reference.

modifyCar (vector<Dealer> &dealers)

Display the Dealer Names and Numbers (use the function on menu #2).

Ask the user for the dealer number and search for this number in the vector in order to retrieve the index where the dealer is.

Show the cars of the dealer (use option 3) - displayCar (Dealer.at[x])

Ask the user to choose the index of the car that will be updated;

Input new data for the car, such as, vin, make, model, year, price

Update dealer.at[x].carArrayPtr[i] with the new data.