PRG355   **LAB #4**

(Marks 1.5%)   Due: next lab class

Classes and Objects

Design a class named **Car** that contains **private data members** to store the following data for a car:
- the car model
- the fuel tank capacity
- the average fuel consumption per 100 km
- the distance that can be traveled on a full tank

The **Car** class should also have the following **public member functions**:
- A function that obtains data for a car from the user (i.e., the car model, the fuel tank capacity and the average fuel consumption).
- A function that computes and returns the distance a car can travel on a full tank.
- A function that computes and returns how many times a car has to be refueled to travel a given distance, which is obtained from the user and passed to the function.

The program should create as many car objects as requested by the user, i.e. a **dynamic array of Car objects.** For each car object the program should obtain the fuel tank capacity and average fuel consumption as well as the car model from the user. The program should compute and display how many times each car has to be refueled to travel the distance entered by the user, as well as the distance each car can travel on a full tank.

NOTE: It should be assumed that the car will start a trip with the **full fuel tank**. A number of stops at the gas station to refuel the car has to be rounded up (i.e., **ceiled**).

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