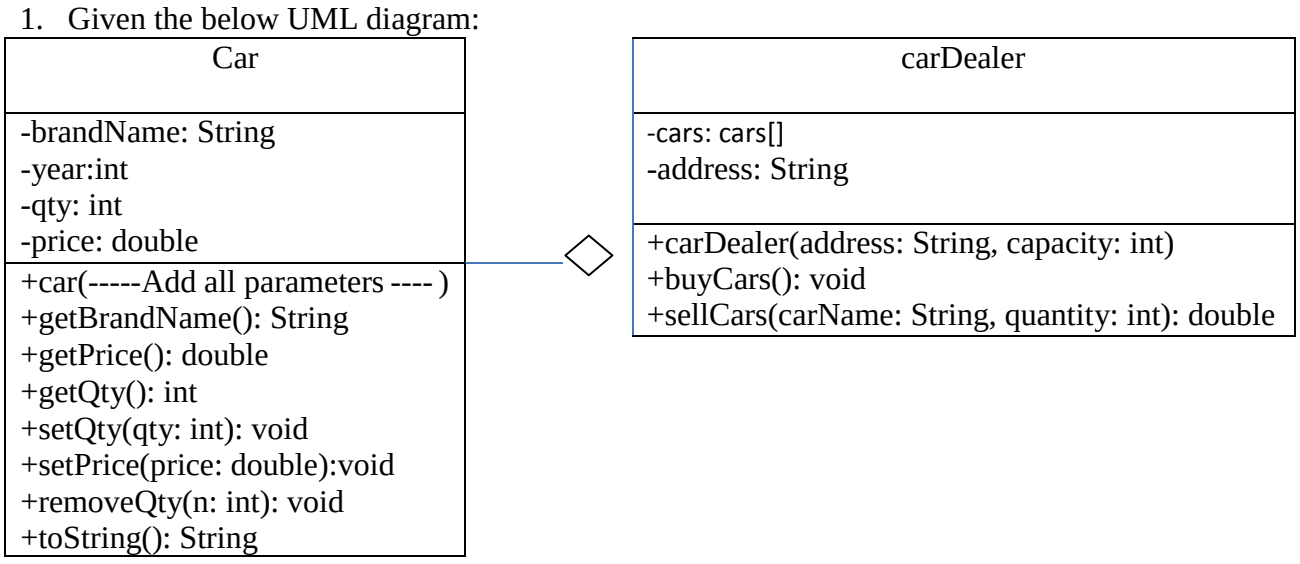
1. Given the below UML diagram:



Implement the class **Car**:

a) Write the all arg-constructor. *If the price (respectively qty) is negative set it to 0.*

b) Write the getter/setter methods.

c) `removeQty`: subtract the number of cars from quantity when selling cars.

d) `toString`: It displays the car's attributes.

Implement another class **carDealer** using the above UML:

a) Write the constructor that takes as parameters, address and capacity which represents the size of the array cars.

b) Write the method `buyCars` reads the information of car objects from the user, creates the objects, and fill them into the array cars.

c) Write the method `sellCars`:
   a. It takes as parameters the brand name and number of cars to sell.
   b. Search for the quantity if available. If the car is found, and the quantity is available then the total price is returned (price*quantity)
   c. The quantity available should be updated by decreasing the quantity available.
   d. If the car is not found, then a "Not found" message should be displayed and the value -1 is returned. If the quantity is not enough, "Not enough quantity" is displayed and and the value -2 is returned.

Write an **application** in which you create a carDealer object of capacity 5. Call the method buyCars. Allow the user to buy a car of his/her choice.