Tutorial - Files

```
+-----------------------------------+
|              Vehicle              |
+-----------------------------------+
| -ID : int                         |
| #rented : Boolean                 |
| #nbHours : int                    |
| #rentalAmount : double            |
+-----------------------------------+
| +Vehicle(in id : int)             |
| +computeRentalAmount()            |
| +display()                        |
| +getNbHours() : int               |
+-----------------------------------+
```

```
+------------------------------------------+   +-------------------------------------+
|                   Car                    |   |                Truck                |
+------------------------------------------+   +-------------------------------------+
| -dailyrate : double                      |   | -hourlyRate : double                |
| -mileage : int                           |   +-------------------------------------+
+------------------------------------------+   | +Truck(in id : int, in rate : double)|
| +Car(in id : int, in rate : double, in   |   | +getHourlyRate() : double           |
|  mileage : int)                          |   +-------------------------------------+
| +getDailyRate() : double                 |
| +getMileage() : int                      |
+------------------------------------------+
```

```
+------------------------------------------+         -vehicles    +-------------------------------------+
|                 Branch                   |                      |              Vehicle                |
+------------------------------------------+                      +-------------------------------------+
| -name : string                           |        1        *    | -ID : int                           |
+------------------------------------------+                      | #rented : Boolean                   |
| +Branch(in n : string, in size : int)    |                      | #nbHours : int                      |
| +addVehicle(in veh : Vehicle) : Boolean  |                      | #rentalAmount : double              |
| +sumRentedCars(in mil : int) : double    |                      +-------------------------------------+
| +saveToFiles(in nbH : int, in dailyR :   |                      | +Vehicle(in id : int)               |
|  double)                                 |                      | +computeRentalAmount()              |
+------------------------------------------+                      | +display()                          |
                                                                  | +getNbHours() : int                 |
                                                                  +-------------------------------------+
```
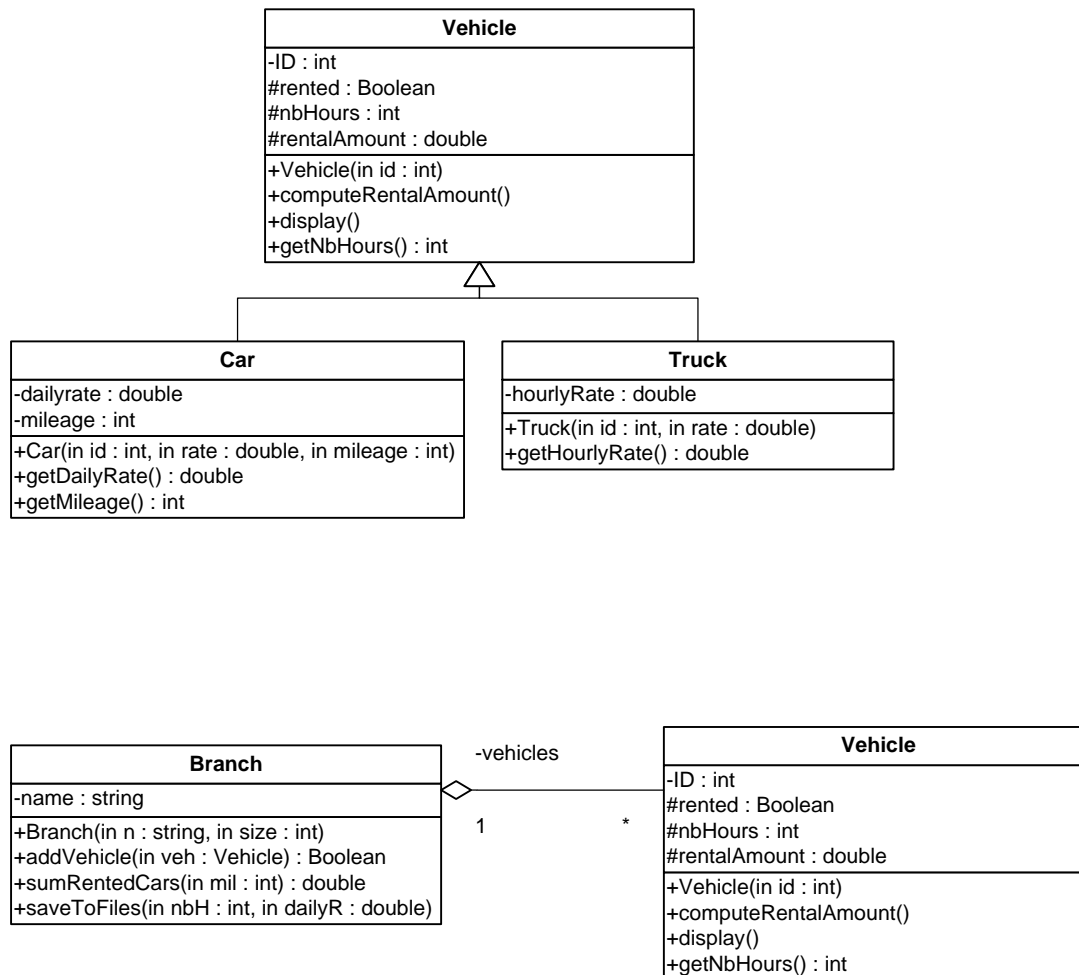
Look at the above UMLs and only write the class **Branch**
- o *ATTRIBUTES*:
  - **name:** the name of the vehicle rental company branch.

- *METHODS*:
  - **Branch(n: string, size: int).** Constructor **.** If the size is less or equal than zero, the constructor throws an exception with the following message "Invalid Size".

  - **addVehicle(veh: Vehicle).** Adds a vehicle to the branch. It returns true if the vehicle is added, false otherwise**.**

  - **sumRentedCars(mil: int).** Computes and returns the sum of the rental amounts of all rented cars having a mileage less than *mil*.

  - **saveToFile(nbH:int, dailyR:double).** This methods saves the vehicles of the branch as follows:
    - The **Car** objects with **dailyRate** equals to *dailyR* are saved in the file "cars.data".
    - The **Truck** objects with **nbHours** greater than *nbH* are saved in the file "trucks.data".

Question: Translate into Java code the class **Branch**.