1. Write a class called `PenDrive` with instance variables `brand`, `storageCapacity` and `price`. The first constructor should take input parameters to set the brand and price, with the storage capacity being set to a default value of 16. The second constructor should take input parameters to set the storage capacity, the brand and the price. The class should also include a `toString()` method.

2. Write a tester class which initialises a separate `PenDrive` object using each of the constructors defined in part 1. Use the `toString( )` method to print the details of each of your `PenDrives`.

3. A Car can be represented as follows:

   Each Car stores information on its fuel level, its fuel capacity, and the number of miles it can be driven per gallon of petrol. The fuel capacity and number of miles per gallon for the Car should be set when the Car is created.

   Implement a Car class which can perform the following operations:

   `getFuelLevel( )` to return the current fuel level

   `addFuel( )` to add a certain amount of fuel. This should be restricted by the capacity of the fuel tank.

   `fillUp( )` to fill the fuel tank

   `drive()` that simulates driving the Car for a certain distance, reducing the fuel level in the fuel tank by distance/miles per gallon. This distance should be restricted by the amount of fuel in the tank.

   Create a UML class diagram and write the java code for the Car class.

4. Write a program to test the Car class. The program should instantiate a Car object before displaying the following menu:

```
1. Display Fuel Level
2. Add Fuel
3. Fill the tank
4. Drive
5. Exit System
```

   The user should repeatedly be asked to choose an option from the menu, until they choose to exit. Options 1 - 4 should result in calls to appropriate methods.