

The Used Car Lot



A used car lot has numerous used cars ready to be re-sold to the public. Each car requires a license plate before it leaves the lot.

a) All license plates issued start with, "AC56" and then contain an incrementing number, e.g. "AC56 0001", "AC56 0002", "AC56 0003" etc. Hint: `String.format("%04d",nextNumber)` will be helpful for formatting the integer with leading zeros.

b) Each car has a *price*, *manufacturer*, *model*, and *licence plate*.

e.g. \$19,000.00 Toyota Prius AC56 0001

c) Each licence plate generated has a unique License Plate Number.

d) Create two classes i.e., a **Car** and a **Plate**

e) Draw the UML diagrams for both the car and the plate classes

f) Code into Java the two classes and a TestProgram. The TestProgram should instantiate at least two cars and output as follows:

```
Blue: Terminal Window - CarLot
Options
$19,000.00 Toyota Prius AC56 0001
$19,500.00 Ford Edge AC56 0002
```

