Sample Problem 2: Grocery Store Bill Generation Application

Class Diagram (ASCII UML)

```
+----------------+        +-----------------+
|    Customer    |<>----- |     Product     |
+----------------+        +-----------------+
| name           |        | name            |
|                |        | pricePerUnit    |
+----------------+        | quantity        |
        |                 +-----------------+
        |
        v
+----------------+
| BillGenerator  |
+----------------+
| calculateBill()|
+----------------+
```
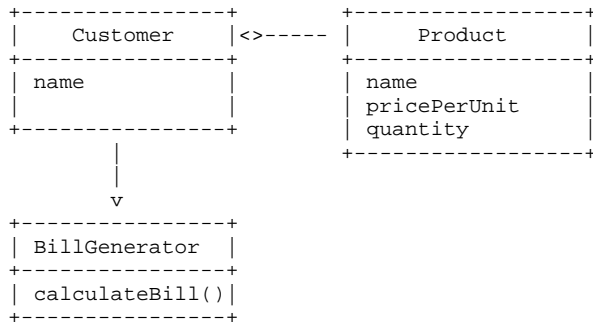
Object Diagram (ASCII UML)

```
Customer: Alice
----------------
Products:
- Apples : 2 kg @ $3/kg
- Milk   : 1 liter @ $2/liter
```

Sequence Diagram (ASCII UML)

```
Customer          BillGenerator
    |                   |
    |-- checkout() -->  |
    |                   |
    |<-- totalBill ----|
```