

Program 6

CS 141
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A cash register contains a number of dollars, quarters, dimes, nickels and pennies, initially 0. Declare a class named *Register* that implements a type representing a cash register.

Implementation Notes—Instance Methods

- *fillDollars(int)*, *fillQuarters(int)*, *fillDimes(int)*, *fillNickels(int)* and *fillPennies(int)* add a given number of the corresponding denomination to the register.
- *purchase(int, int)* takes (in cents) a given purchase price and amount tendered, adds the amount tendered to the register, and removes the correct change from the register. It should also print the amount tendered, the purchase price and change amount; for example:

```
tendered: 1100
price:    1022
change:   78
```

- *refund(int)* takes (in cents) a given refund amount, and removes the refund amount from the register. It should also print the refund amount; for example:

```
refund:   256
```

- *report()* prints (in cents) the total amount taken in (fills and tendered), total amount given out (change and refunds), and total amount currently in the drawer, as well as the number of each denomination currently in the drawer; for example:

```
Total Amount in: 10394
Total Amount out: 1646
Amount in Drawer: 8748
```

```
Money in Drawer:
75 dollars
27 quarters
42 dimes
24 nickels
33 pennies
```

- In the methods above, assume that all amounts are handled using the least number of dollars and coins possible, amounts tendered are never less than the purchase price, and the register is always filled with a sufficient number of each denomination to remove the correct change.

A Java source code file named `Program6.java` is provided as a driver program. It is available on the course web site at

<http://www.csupomona.edu/~carich/classes/cs141>

Compile the *Register* class and driver program, run the program and redirect the output to a file. Hand in a printed copy of the source code files and the output file.