TRY IT

In this assignment you modify the class `Portfolio` from Chapter 21, which was just printing some hard-coded statements. Now you create and populate the database table Portfolio and then read and display the data from there.

Lesson Requirements

You should have Java installed.

> **NOTE** *You can download the code and resources for this "Try It" from the book's web page at* `www.wrox.com/go/javaprog24hr2e`. *You can find them in the Lesson21.zip.*

Hint

Obtaining a database connection is a slow operation, and doing it from inside the method `run()` every time you start a new thread is not the best solution. Consider creating a database connection up front and passing it to the thread before starting it.

Step-by-Step

1. In the database Lesson21 create the table Portfolio using the following SQL statement:

```
create table Portfolio(
id INTEGER NOT NULL,
symbol VARCHAR(10) NOT NULL,
quantity INTEGER NOT NULL,
price NUMERIC NOT NULL, PRIMARY KEY (id)
);
```

2. Populate the table Portfolio with three records, for stocks traded under the symbols IBM, AMZN, and AAPL respectively:

```
insert into Portfolio values (1,'IBM',500,105.50),
 (2,'AMZN',1000,15.25),(3,'AAPL',2000,272.50);
```

3. Create a new Eclipse project.
4. Create a class called `Portfolio` that is similar to the one shown in Listing 17-5 from Lesson 17:

```
public class Portfolio implements Runnable {
    public void run() {
       System.out.println( "You have 500 shares of IBM ");
     }
}
```

5. Modify the code of `Portfolio`: instead of just printing "You have 500 shares of IBM," have it connect to the database, select all the data from the table `Portfolio`, and print the symbol, quantity, and total value. Calculate the total value by multiplying price by quantity.
6. Create a testing class called `ShowMyPortfolio` that instantiates and starts the thread `Portfolio`.
7. Test this program.

> ***TIP*** *Please select the videos for Lesson 21 online at* `www.wrox.com/go/javaprog24hr2e`. *You will also be able to download the code and resources for this lesson from the website.*