

**Homework #1**  
**OOP courses number 23544 & 23545**

**<<Company Total Sales>>**

**Description:**

A company has four salespeople (numbered from 1 to 4), who sell five different products (numbered from 1 to 5). Once a day, each salesperson passes in a slip for each type of product sold. Each slip contains the following:

- The salesperson number,
- The product number,
- The total Qatar Riyals value of that product sold that day.

1. Propose a class **Slip** to store the data of sales slips.
2. Each salesperson passes in between 0 and 5 sales slips per days. Propose an array, **slips**, to store the data of sales slips for a whole month (31 days). Assume that the total QR value of each product never exceeds 99QR. Write a method, **collectSlips**, to collect the sales information for a month by randomly filling the slips array.
3. Write a method, **summarizeSalesSlips**, that will read all this information for one month's sales and summarize the total sales by salesperson and by product. All the totals should be stored in **sales**, a two dimensional array.
4. Write a method, **printTotalSales**, to display the sales results in tabular format, with each column representing a particular salesperson and each row representing a particular product.
5. Write a method, **totalSalesProduct**, to Cross-total each row to get the total sales of each product for the month. Print these totals.
6. Write a method, **totalSalesPerson**, to Cross-total each column to get the total sales by each salesperson for last month. Print these totals.
7. Modify your tabular output to include these cross-totals to the right of totals rows and to the bottom of the totals columns.

All the code related to questions 2-7 should be written inside a second class **TotalSales**. The main function should be part of this class.

**Submission Deadline:** The homework should be submitted **before** Sunday 10, 2011. This is a firm deadline, passed this dates submissions will be blocked by the system.

**Submission Format:** Comment and organize your program to make it as clear as possible and upload your files on the black board system. Add to your submission a readme text file to give any important information you need to communicate to me. Your submission should include only three files: Slip.java, TotalSales.java, and readme.txt (if needed).