BookBuyers.java

Directions: You have at least two friends going to SJSU. They are going to take three classes together. They need to buy their books. Ask the user how the cost for the books for each course – Calculus, English and History – then calculate the total cost including the discount and tax as well as the total number of books purchased. Print a formatted bill with all of this information.

- Pseudocode is required.
- Input <u>four</u> values, the book price for each course: Calculus, English and History for one person. These can be inputted all together or in response to separate prompts. (We'll discuss which is better design, and how we could be sure, later this week; do whichever you think is best.)
- Number of books per class: Calculus 1, English 5, History 2. All of the English books cost the same amount and the same thing for History books.
- Testing planning is required: As the last thing in the heading pseudocode, list out what you would use to test the program. Be complete: list data types and a range of values. Your teacher will guide you through this several days after this is assigned, so don't worry about it until discussed in class.
- Calculate *all* values shown in the example below, and at a later step, print them with categories left justified, '=' lined up, and decimal points lined up.
- DO NOT use tabs or sets of spaces to format the output. Use printf. We will no longer use Format.
- To get numbers with a comma, ex 1, 100.18, insert a comma between the modulus symbol and the field width. Ex printf("...%,20.2f...", number);
- Show decimals to two places.
- Don't worry about rounding.
- Use *final* constants for discount (10% or 0.10) and tax (9.25% or 0.0925). No magic numbers!
- Refer to the Best Practices we use in class Pandas Don't Eat Oreos gives a summary.

Example of output data (accessed 6/2015):

Sample run. User input is in bold.

Enter the costs for Calculus, Spanish, English and History for one person, separated by tabs: 157.45 20.89 148.78

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Calculus books
                       $
                             314.90
                       $
                             208.90
English books
                       $
                            595.12
History books
                       $
                           1,118.92
Sub total
                            111.89
Discount
                    = $
Total before tax
                           1,007.03
                              93.15
Tax
Grand total
                          1,100.18
```

The total cost for 16 books is \$1,100.18. Thank you for shopping with BooksRUs.com.