

Homework Assignment #3

Project 1

Problem Statement:

The Colorado Health Products Corporation (CHPC) sells personal protective gear to hospitals and medical practices (Physicians, Dentists, etc.) in Colorado, Wyoming, and New Mexico. CHPC needs a sales report of the sales for each day, and your job is to write program that will take sales data from the user, aggregate it, and produce a report. The report should begin by asking the user to input the state, sale date, and sales tax rate for the given state- this data should then be displayed back to the user only once- this is the report "header". Then the report will then display an output line for each sale showing the sale ID, the pre-tax sale sub total, and the after-tax sale amount paid by the customer. After all sales records are displayed a report summary is required to display the total subtotal amount, the total post-tax sale amount and the average sale amount. The summary must also identify the "sale with the highest post-tax sale amount" by displaying the highest post-tax sale amount and associated sale ID. In the event of multiple instances of the largest post-tax sale amount only the first instance should be reported. Note that the subtotal amount is the "listed price"- similar to a "Manufacturer's suggested retail price". The post-tax sale amount is the actual amount of the sale after taxes have been applied. The tax rate will vary by state, so it is an input field.

I/O Design:

Output:

- state, selected state of the sales report
- saleDate, date of the selected sales report
- salesTaxRate, tax rate of the selected sales report
- saleID, ID number of each sale
- saleSubTotal, sub-total amount of each sale
- salePostTotal, total post-tax amount of each sale
- totalSubTotal, total sub-total of all sales
- totalPostTotal, total post-tax amount of all sales
- avgPostTotal, average of total post-tax amount of all sales
- highPostTotal, highest post-tax amount sale out of all the sales
- highPostTotalSaleID, sale ID of the highest post-tax amount sale out of all the sales

Input:

- state, selected state of the sales report
- saleDate, date of the selected sales report
- salesTaxRate, tax rate of the selected sales report
- saleID, ID number of each sale
- saleSubTotal, sub-total amount of each sale