

Coding Problem: Sales Taxes

Please include all source files, unit tests, readme, batch files, etc. with your solution and e-mail to the person conducting your technical interview and cc: your recruiter.

Basic sales tax is applicable at a rate of 10% on all goods, except books, food, and medical products that are exempt. Import duty is an additional sales tax applicable on all imported goods at a rate of 5%, with no exemptions.

When I purchase items, I receive a receipt which lists the name of all the items and their price (including tax), finishing with the total cost of the items, and the total amounts of sales taxes paid. The rounding rules for sales tax are that for a tax rate of $n\%$, a shelf price of p contains $(np/100)$ rounded up to the nearest 0.05 amount of sales tax.

Write an application that prints out the receipt details for these shopping baskets:

INPUT

Input 1:

1 book at 12.49
1 music CD at 14.99
1 chocolate bar at 0.85

Input 2:

1 imported box of chocolates
at 10.001 imported bottle of
perfume at 47.50

Input 3:

1 imported bottle of perfume
at 27.991 bottle of perfume at
18.99
1 packet of headache pills at 9.75
1 imported box of chocolates at 11.25

OUTPUT

Output 1:

1 book: 12.49
1 music CD: 16.49
1 chocolate bar: 0.85
Sales Taxes: 1.50
Total: 29.83

Output 2:

1 imported box of chocolates: 10.50
1 imported bottle of perfume: 54.65
Sales Taxes: 7.65
Total: 65.15

Output 3:

1 imported bottle of perfume: 32.19
1 bottle of perfume: 20.89
1 packet of headache pills: 9.75
1 imported box of chocolates: 11.85
Sales Taxes: 6.70
Total: 74.68