

Interview Programming Assessment

Introduction

People say the proof is in the pudding. Similarly when hiring, one of the best ways to understand the technical skills of an individual is to let them solve a problem and share their code.

Purpose of the Assessment:

- Get a quick understanding of your knowledge and skill level w.r.t Designing & Programming
- Measure your solution against the baseline we've established over the years having interviewed 1000's of developers

Please note that it is very important for you to spend quality time and finish the assessment on time.

As part of the assessment, you will be presented with an exercise. The exercise will look at how you:

- Design, code and test a program from scratch based on a problem definition

Expected output

- Source code + test code

You have up to **4 hrs** to finish this exercise. Please skip the UI portion and focus on the core logic.

Zip your assessment project and please email this to naresh@agilefaqs.com. (Make sure your zip does not contain any DLLs or Exe files. Else the email will bounce. Also please send only in .zip format.)

Problem Summary - Big Bill's Tax Calculator

You see that big feller on the right?

That's Big Bill. He's part cowboy, part business mogul.

Big Bill's company, **Wild West Stores**, has a billing system that has been generating some *unusually big* bills of late.



Old Mrs. Smith was billed \$3,000 dollars sales tax for buying 5 items at the store.

Big Bill has had enough! He wants a quality sales tax calculator and wants YOU to program it.

Sales Tax Calculator Logic

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 you purchase items you 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 sales tax is rounded up to the nearest 0.05 amounts.

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

Input	Output
1 book at 12.49 1 music CD at 14.99 1 chocolate bar at 0.85	1 book: 12.49 1 music CD: 16.49 1 chocolate bar: 0.85 Sales Taxes: 1.50 Total: 29.83
1 imported box of chocolates at 10.00 1 imported bottle of perfume at 47.50	1 imported box of chocolates: 10.50 1 imported bottle of perfume: 54.65 Sales Taxes: 7.65 Total: 65.15
1 imported bottle of perfume at 27.99 1 bottle of perfume at 18.99 1 packet of headache pills at 9.75 1 box of imported chocolates at 11.25	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

Note: Document the necessary assumptions and email them to us.

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Agile FAQS Technology Private Limited, No.82, 3rd Floor, J M Road, Avenue Road Cross, Bangalore 560002 tel 9930933302