

Unit 4 Assignment

Directions:

Please complete the following assignment to signify your completion of Unit 4. All programming projects need to be completed and submitted electronically, following the Electronic Submission Guidelines discussed in class.

Background:

The purpose of this assignment is to get practice working with the various flow-of-control statements that are available in Ruby. You are welcome to use any of the ones you know, even if we haven't covered them yet in the course content. I usually have an idea how to solve the programming problems and they won't require anything beyond the statements we have learned so far.

Project 1: CorsairBurger Calculator

Write a Ruby program that calculates costs for a new food service provider, CorsairBurger. Meal prices are based on the type of burger ordered (\$2.00 for a plain burger, \$2.50 for a cheeseburger, \$4.00 for a double burger and \$5.00 for a double burger with cheese), whether fries and a drink are desired (\$2 more for fries and a drink), Total meal charges will get discounted based on large parties (5% reduction for ten or more burgers ordered), and whether the diner is an SMC student (\$0.50 reduction per burger ordered). Be sure to add 8.25% sales tax to get the total bill. Be sure your program does not allow negative data or for the number of fries and drinks ordered to exceed the number of burgers ordered. The sample program dialogs below should help you to see how to perform this calculation.

CorsairBurger Meal Calculator

Enter the number of burgers you want:-20
Sorry Charlie!

Continue(y/n)? **y**

Enter the number of burgers you want:1
Enter the number of cheeseburgers you want:-20
Sorry Charlie!

Continue(y/n)? **y**

Enter the number of burgers you want:1
Enter the number of cheeseburgers you want:0
Enter the number of double burgers you want:-20
Sorry Charlie!

Continue(y/n)? **y**

Enter the number of burgers you want:1
Enter the number of cheeseburgers you want:0
Enter the number of double burgers you want:0
Enter the number of double burgers with cheese you want:-20
Sorry Charlie!

Continue(y/n)? **y**

Enter the number of burgers you want: **1**
Enter the number of cheeseburgers you want: **0**
Enter the number of double burgers you want: **0**
Enter the number of double burgers with cheese you want: **0**
SMC Student diner discount with each burger? [1=YES/0=NO]: **0**
How many fries and drinks you want with your order? **20**
Sorry Charlie!

Continue(y/n)? **y**

Enter the number of burgers you want: **1**
Enter the number of cheeseburgers you want: **0**
Enter the number of double burgers you want: **0**
Enter the number of double burgers with cheese you want: **0**
SMC Student diner discount with each burger? [1=YES/0=NO]: **0**
How many fries and drinks you want with your order? **0**
Meal Cost: \$ 2.00
Reductions: \$ 0.00
Sales Tax: \$ 0.17
Total Cost: \$ 2.17

Continue(y/n)? **y**

Enter the number of burgers you want: **3**
Enter the number of cheeseburgers you want: **3**
Enter the number of double burgers you want: **3**
Enter the number of double burgers with cheese you want: **3**
SMC Student diner discount with each burger? [1=YES/0=NO]: **1**
How many fries and drinks you want with your order? **12**
Meal Cost: \$ 64.50
Reductions: \$ 12.45
Sales Tax: \$ 4.29
Total Cost: \$ 56.34

Continue(y/n)? **y**

Enter the number of burgers you want: **1**
Enter the number of cheeseburgers you want: **1**
Enter the number of double burgers you want: **1**
Enter the number of double burgers with cheese you want: **1**
SMC Student diner discount with each burger? [1=YES/0=NO]: **1**
How many fries and drinks you want with your order? **4**
Meal Cost: \$ 21.50
Reductions: \$ 2.00
Sales Tax: \$ 1.61
Total Cost: \$ 20.11

Continue(y/n)? **n**