Unit 5 Assignment

Directions:

Please complete the following assignment to signify your completion of Unit 5. 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 loops and functions. Loops are very useful in programming and, often, programs use loops in situations where new programmers might not spot a loop. When working with loops, it is important that you make progress toward the goal of getting the loop to stop. Otherwise, your loops will run forever, which is a very common programming problem for new programmers. Functions are the backbone of Ruby programs. We need to get very comfortable with how to define and call functions. Functions are a problem-solving strategy. Functions break a large, complex problem into smaller, more manageable pieces.

Project 1: SMC Student Fees
Create a Ruby program which calculates student fees for those attending Santa Monica College. IN ORDER TO RECEIVE FULL CREDIT, YOU MUST CREATE AND CALL FUNCTIONS WITH PARAMETERS TO SOLVE THIS PROBLEM. IN ADDITION IN ORDER TO RECEIVE FULL CREDIT, YOU MUST THROW AND CATCH EXCEPTIONS WHEN THE USER ENTERS INVALID DATA VALUES.

Summarized in the chart below is the cost calculations I want your program to perform.

SANTA MONICA COLLEGE STUDENT FEES (as of Fall, 2015)

Enrollment Fee	$ 46.00/ unit for California Residents $ 335.00/ unit for F1/Non-Residents
Student Services Fee (AS Sticker fee is Optional, saving $19.50) (ID Card fee is Optional, saving $13)	$ 48.50 Winter/Summer $ 51.50 Fall/Spring
Parking Decal (Optional)	$ 45.00 Winter/Summer $ 85.00 Fall/Spring

A number of different program dialogues describe the program I am looking for.

```
SMC Fee Calculator
Enter number of units enrolled: 18
Is this Fall[0], Winter[1], Spring[2] or Summer[3] session: 0
Are you a state resident[0] or not[1]: 0
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Want a parking decal? [y/n]: n
Want an AS sticker? [y/n]: n
Want an ID card? [y/n]: n
For Fall semester, your total fees are $ 847.00

SMC Fee Calculator
Enter number of units enrolled: 6
Is this Fall[0], Winter[1], Spring[2] or Summer[3] session: 1
Are you a state resident[0] or not[1]: 1
Want a parking decal? [y/n]: y
Want an AS sticker? [y/n]: y
Want an ID card? [y/n]: y
For Winter semester, your total fees are $ 2103.50

SMC Fee Calculator
Enter number of units enrolled: 18
Is this Fall[0], Winter[1], Spring[2] or Summer[3] session: 2
Are you a state resident[0] or not[1]: 1
Want a parking decal? [y/n]: y
Want an AS sticker? [y/n]: y
Want an ID card? [y/n]: y
For Spring semester, your total fees are $ 6166.50
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