

CIS 1111 Relational Operators Assignment – 20 points

Description: For this assignment, you will be writing a sweepstakes program that allows the user to enter to win one of the three grand sweepstake prizes. However, their price guess must be within a certain percent of the actual price of the prize. See the table below for guessing criteria.

Item Price	\$0 - \$100	\$101 - \$500	\$501 – \$1,000	\$1,001 +
Guess allowance	12%	10%	5%	0% (must be exact)

Requirements:

1. Display one item from each price bracket to the user.
2. Allow the user to select which item they would like to guess the price of.
3. Determine if the user's price guess is within the acceptable guess range. Use arithmetic operators to calculate the price range. Do not use literal numbers for the low and high ends of the range..
4. Display the user's winning status (win/lose) to them.
5. If the user won, congratulate them. If the user lost, display the actual price of the item.
6. Program must be documented with the following:
 - a. //Name
 - b. //Date
 - c. //Program Name
 - d. //Program Description

Sample Output:

(user wins)

```
~*~*~ Welcome to The Price Is Close-Enough! ~*~*~

1. 1 pair of Apple Airbuds
2. A 5 pack of tickets to the Opera
3. An all-expense paid cruise to Alaska
4. One week at a 5-star resort in Bali

Please enter the number for the prize you wish to guess the price of: 1

What is your price guess for Apple Airbuds? $92

Congratulations - your guess was close enough! You WIN!

Press any key to continue . . .
```

(user lost)

```
~*~*~ Welcome to The Price Is Close-Enough! ~*~*~  
  
1. 1 pair of Apple Airbuds  
2. A 5 pack of tickets to the Opera  
3. An all-expense paid cruise to Alaska  
4. One week at a 5-star resort in Bali  
  
Please enter the number for the prize you wish to guess the price of: 2  
  
What is your price guess for 5 Opera Tickets? $30  
  
Sorry, your guess was not close enough. The actual item price is $150  
  
Press any key to continue . . .
```

Test Data:

Prize	Price
Apple Airbuds	\$ 99.99
5 Opera Tickets	\$ 150.00
Alaskan Cruise	\$ 549.99
Bali Resort	\$1,349.58

Submission Requirements:

Upload the following to the drop box:

1. Your .cpp file
2. Screenshot of your output and program code
3. A flowchart or pseudocode of the program
4. A paragraph (3-5 sentences) describing your process for completing this assignment (where did you start? Did you run into any issues? How did you solve them? Did you learn anything new? Include anything you think is relevant.)

Grading rubric for this assignment:

	Low End (did not do or very little effort)	High End (Requirements met with high effort)
Program successfully compiles	0	5
Meets all program requirements	0	5
Properly submitted all required files to the drop box (4 items)	0	5
Test Data matches output with no hard coding	0	5