Programming Assignment:
Restaurant Food Ordering System

Due: posted online

Topics

Rounding, If-Else, Switch statement, While loop

Problem

Your restaurant business has been getting a lot of attention lately and the customers requested you to start an online delivery system. Write an application that presents the customer with a menu of the restaurant, let them choose the dishes from the menu, and show them the total price of the order.

Procedure

1. Present the user with the menu containing various dishes and their prices
2. Ask the user to enter the number of different dishes they like to order
3. For each dish, ask how many servings of that dish they would like to order
4. Calculate the tax
5. Ask if they want to leave a tip and calculate the tip if they say yes
6. Show the user the breakdown of the prices and the total price for their order

Sample Output

Mr.K's Indian Food Menu

	Item	**Price** (in dollars)
1	Chicken Curry	10.69
2	Shrimp Curry	14.25
3	Naan	3.59
4	Chai	2.45
5	Crabs	7.24
6	Lamb Biriyani	15.59
7	Veg Biriyani	11.27
8	Gobi Manchurian	10.35
9	Chana Masala	9.45
10	Kheer	4.99

How many different dishes would you like to order today? 3
Enter dish 1 [1-10] 1
How many servings of dish 1 would you like to order? 1
Enter dish 2 [1-10] 10
How many servings of dish 10 would you like to order? 2
Enter dish 3 [1-10] 5
How many servings of dish 5 would you like to order? 1
Enter the tax %: 5.5
Do you want to add tip? ['y' - yes or 'n' - no] y
Enter tip % [0-100]: 10
Price: 27.91
Tax (5.5%): 1.54
Tip (10.0%): 2.95
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Total Amount: $32.4

Your order has been placed and will be delivered soon!

Requirements

- There should be a minimum of 10 dishes
- You should use at least one **while** loop
- You should use at least one **if** statement
- You should use at least one **switch** statement
- The double values (price, tax, tip, and total amount) should be rounded to two decimal digits depending on whether the 3rd decimal digit is less than or equal to 5. Few examples: 4.456 = 4.46, 5.784 = 5.78, 4.5648 = 4.56. You should not use any rounding functions.
- Menu and prices are left up to your discretion but the rest of the output should look exactly the same as shown in the sample output

Grading Criteria - 100pts

1. Header [5pts]: Author, Date, Purpose, etc.
2. Good Programming Practices [5pts]: commenting, white space, indentation, naming conventions, etc.
3. Output [5pts]: The format of the output should be similar to the sample outputs given.
4. Topic Knowledge [5]: Rounding, If-Else, Switch statement, While loop
5. Pseudocode [5]: major logic flow
6. Errors Encountered [5]: at least 6 screenshots with explanations of cause of errors
7. Test Runs [10] (minimum of 5 different test runs should be included in the report. Screenshots are fine)
8. Code [60]

Note: If your code does not compile, your score will be an automatic zero regardless of other assignment sections (no partial credits), with the exception of contacting me beforehand.

Deliverables

1. *RFOS.java* - Use the template java file provided and do not change the class name

2. Pseudocode, Test runs, and Errors Encountered in **one** PDF file and name it *LastName-FirstName-Report.pdf*

Create a folder with these two files in it and name it *LastName-FirstName-CS112PA2*, and compress the folder. Submit the zip file online. Name of the zip file should be *LastName-FirstName-CS112PA2.zip*