

Purpose: simple decision making with data between a range of values

Learning outcomes: 1, 2 and 3

Time: submit before 5pm Friday of Week 4.

Resources: MyLO: lecture notes and tutorial materials

Task:

A restaurant has controversially decided to charge customers a surcharge multiplier on their meal based on their age:

Age	Meal Surcharge
10 or less	0.95
More than 10 but less than or equal to 20	1.5
More than 20 but less than or equal to 40	2.5
More than 40	3.5

Your program should ask the user their age and then their pre-surcharge meal cost. It should then display the correct total meal cost for the user after the surcharge multiplier has been applied ($\text{total_cost} = \text{meal_cost} * \text{meal_surcharge_multiplier}$).

For example, if the user is 27 and their meal cost was \$10.50, then the output should indicate their total meal cost is \$26.25 (meal cost 10.50 * meal surcharge multiplier 2.5) .

Note: You will need to use appropriate formatting with the *print* function to ensure monetary amounts are shown properly (2 digits after the decimal point) - this will be discussed in lectures.

Submission Details

Upload the following to the MyLO submission folder for this task:

1. The source file (i.e. the **.py** file containing your code)
2. A screenshot of the Python shell window that shows the **execution results** of the source code.

Assessment Criteria & Hints

A completed submission **must**:

1. Include comments about the program purpose and the author of the program (your name)
2. Declare variables and assign initial values at the start of the program
3. Use meaningful names for variables, starting with a lower case
4. Use constant variables (all UPPERCASE) to store the values of the surcharge multipliers
5. Ask the user to enter the age and their meal cost (consider what *sort of data* will be entered)
6. Calculate the total meal cost correctly - you will need to compare the age against the ranges from the table above
7. Display the resulting information properly with appropriate messages
8. Submit both the source file and the screenshot