

Programming Assignment 2

Objectives:

- Practice decision structures
- **DON'T USE ANYTHING WE HAVEN'T COVERED IN CLASS!**

Assignment:

In this assignment, you are going to write a program that calculates the tip that will be added to the final cost of a meal at a restaurant based on customer satisfaction. First, ask the user to enter the total cost. Next, display the rating system for their experience, and ask them to enter their rating as 1, 2, or 3. Based on the rating, calculate the correct tip. The tip is calculated as follows:

- **20%** tip for totally satisfied
- **15%** for satisfied
- **10%** for dissatisfied

Finally, display the tip and final total.

Test Cases

As you write your program, you will need to test it, especially your decision structures. Download the Test Cases file from Moodle and fill in each row with the results of the tests in the file. It doesn't matter if the test is successful or not; the point is to document the testing process.

Sample Executions:

Example 1:

```
=====
                        CHECKOUT
=====

Enter the total cost: 100

=====
                        RATING
=====

+-----+
| Rate Your Experience! |
| ----- |
| 1 = Totally Satisfied |
| 2 = Satisfied         |
| 3 = Dissatisfied      |
+-----+

Enter rating (1 - 3): 1

=====
                        PAYMENT
=====

TIP:                20.00
TOTAL:              120.00

=====
```

Example 2:

```
=====
                        CHECKOUT
=====

Enter the total cost: 55.90

=====
                        RATING
=====

+-----+
| Rate Your Experience! |
| ----- |
| 1 = Totally Satisfied |
| 2 = Satisfied         |
| 3 = Dissatisfied      |
+-----+

Enter rating (1 - 3): 2

=====
                        PAYMENT
=====

TIP:                8.38
TOTAL:             64.28

=====
```

Example 3:

```
=====
                        CHECKOUT
=====

Enter the total cost: 23.75

=====
                        RATING
=====

+-----+
| Rate Your Experience! |
| ----- |
| 1 = Totally Satisfied |
| 2 = Satisfied         |
| 3 = Dissatisfied      |
+-----+

Enter rating (1 - 3): 3

=====
                        PAYMENT
=====

TIP:                2.38
TOTAL:              26.12
=====
```

Requirements:

- Use an updated comment block
- Your program should use the following comment block at the very beginning of your program.

```
# Name: Your name          Date Assigned: Fill in
#
# Course: 2000-Sec #      Date Due: Fill in
#
# File name: Fill in
#
# Program Description: Brief description of what the program does.
```

- Use appropriate comments throughout the program
- Make good use of whitespace
- Output must be neat, logical, and easy to understand.

Deliverables:

- Upload the file that has your source code to Moodle with the extension .py. The file should be from **script** mode, NOT interactive mode. Upload the Excel file with your Test Cases.

Grading:

Total Points	10 points
Display headers	1 point
Ask for total cost	1 point
Display rating system	1 point
Ask for rating	1 point
Determine the tip	3 points
Display the tip	1 point
Display the total	1 point
Test Cases	1 point
Not enough comments/whitespace.	-1 point
Output is difficult to read / understand or messy.	-1 point
Doesn't have good variable names.	-1 point