Richard Hayes Crowley

01/31/2021  
CSC\_157\_LAB\_02   
  
**Source code:**

*# Richard Hayes Crowley*

*# 01/31/2021*

*# CSC\_157\_Lab\_02*

*# the restaurant tip calculator*

class EmptyValue(Exception):

"""Custom exception for empty restaurant or server name"""

*pass*

*# some error handling,*

*# TODO: execute failed input question again after exception, current behavior is the loop restarts at the beginning after an exception*

print("Richard Hayes Crowley \n01/31/2021 \nCSC\_157\_Lab\_02")

*while* True:

*try*:

locale = input("please enter the restaurant location: ")

*if* not locale:

*raise* EmptyValue

server = input("please enter the server name: ")

*if* not server:

*raise* EmptyValue

subtotal = float(input("please enter the menu check subtotal: "))

tax = float(input("please enter the total tax amount: "))

*except* EmptyValue:

print("Please enter a restaurant location and server name before continuing")

*except* ValueError:

print("input is not a float type, try again!")

*else*:

*break*

serviceType = "excellent service"

*# process the data*

*# the first tip level*

tip1 = 0.22 \* subtotal

tip2 = 0.2 \* subtotal

tip3 = 0.18 \* subtotal

*# the output for the first tip level*

*# print("for:", serviceType, " ; the tip is $", format(tip1, "0.2f"))*

print("\n\*\*\* suggested tip: \*\*\*\n")

print(

f"Excellent Service 22% (Tip : ${round(tip1,2):0.2f}; Total: ${round((subtotal + tax + tip1), 2):0.2f})")

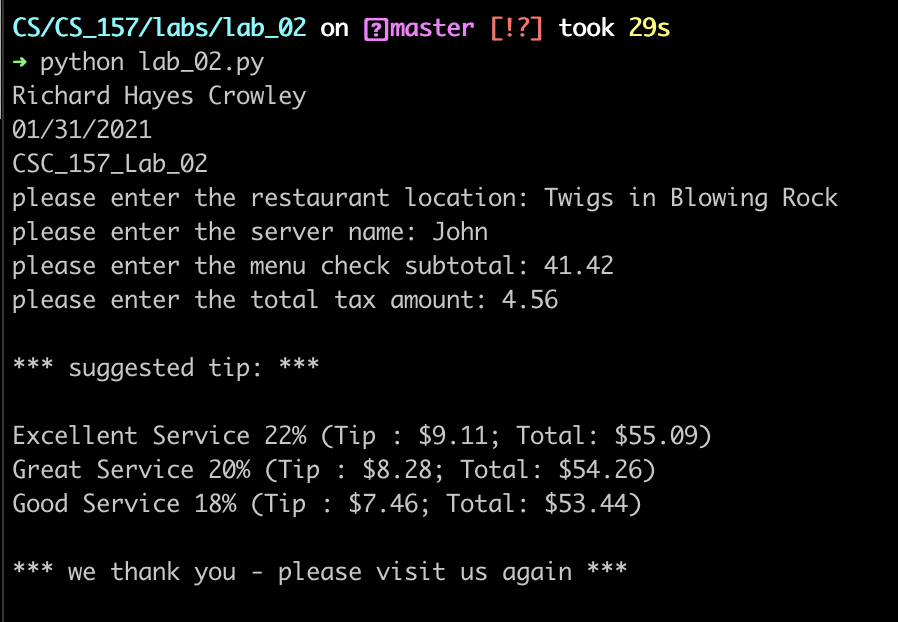
print(

f"Great Service 20% (Tip : ${round(tip2,2):0.2f}; Total: ${round((subtotal + tax + tip2), 2):0.2f})")

print(

f"Good Service 18% (Tip : ${round(tip3,2):0.2f}; Total: ${round((subtotal + tax + tip3), 2):0.2f})")

print("\n\*\*\* we thank you - please visit us again \*\*\*\n")

**Output:**