Lesson 9 Assignment

Laura Bartlett

Source Code:

#Lesson 9 Assignment

#import locale and set to US

import locale as lc

lc.setlocale(lc.LC\_ALL, "en\_US")

#Function to collect user input for income and return income to main:

def get\_income():

    #loop until the user enters valid amount, in this case either 0 or a positive number, income designated float and exception handling for float error:

    while True:

        income=(input("Please enter your income :  "))

        try:

            your\_income = float(income)

            if your\_income > 0:

                print(f"\nYou have entered: {income}\n")

                return your\_income

            else:

                print("\nPlease enter a valid number!\n")

        except ValueError:

            print("\nInvalid input, please enter a valid dollar amount.\n ")

#Function to create empty list for expenses, collect user input of expenses and append to list, then return list to main.

# 0 to finish option and error for negative expenses, expense designated float and error handling.

def get\_exp():

    exp\_list = []

    while True:

        try:

            expense = float(input("\nPlease enter an expense and press enter, or press 0 when finished:  " ))

            if expense == 0:

                break

            if expense < 0:

                print("\nExpenses cannot be negative!\n")

                continue

            exp\_list.append(expense)

        except ValueError:

            print("\nPlease enter a valid number!\n")

    return (exp\_list)

#Function to return the sum of expenses list to the main function

def calc\_exp(exp\_list):

    return (sum(exp\_list))

#Main function, print statement with purpose of the program, functions and their returned variables defined

#I used the f string ${VARIABLE:.2f} in print functions to format the final output.

def main():

    print("\n\*\*\*\*\*\*\*\*\*(: Budget Buddy :)\*\*\*\*\*\*\*\*\*\n\*\*\*\*\*Your Personal Budget Tracker!\*\*\*\*\*\n---------------------------------------")

    income = get\_income()

    expenses = get\_exp()

    total\_exp = calc\_exp(expenses)

    budget = income - total\_exp

    #formatting the expenses list, indexing and using previously imported locale module

    #to format currency:

    formatted = [f"Expense {i+1}:  {lc.currency(expense, grouping=True)}" for i, expense in enumerate(expenses)]

    print("\nHere are your budget reults:\n---------------------------------------\n")

    print(f"Your total income is : ${income:.2f}")

    print(f"Your total expenses are : ${total\_exp:.2f}")

    print(f"Remianing budget : ${budget:.2f}")

    #Print list of formatted expenses:

    print("\nList of Expenses:\n---------------------------------------\n")

    for formatted\_exp in formatted:

        print(formatted\_exp)

if \_\_name\_\_ == '\_\_main\_\_':

    main()

print("Completed by Laura Bartlett")

Screenshots:

A screenshot of a computer

Description automatically generated

