Exercise 3

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1 Exercise 3: Personal Finance Manager

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You are building a simple personal finance manager to help users keep track of their expenses and manage their budgets.

Task 1: Write a function add_income(income, total) that adds a new income amount to the total balance.

Task 2: Write a function subtract_expense(expense, total) that subtracts an expense amount from the total balance.

Task 3: Write a function calculate_balance(income, expenses) that calculates the remaining balance after accounting for all expenses.

Task 4: Create a main program that allows users to input their income and expenses, and then use the functions to display their remaining balance. The program should also warn the user if their expenses exceed their income.

```python
[11]: def add_income(income, total):
          return total + income

      def subtract_expense(expense, total):
          return total - expense

      def calculate_balance(income, expense):
          return income - expense

      def main_prog():
          total_income = 0
          total_expense = 0
          ask = """ (1) Add to my wallet \n (2) Track expenses \n (3) Check Balance
       \n (4) Exit"""

          while True:
              try:
                  print("\n Welcome to your personal finance manager!")
                  print(ask)
                  user = int(input("How can I help you today? "))
```

```python
            if user == 1:
                i = float(input("Please input your income:"))
                total_income = add_income(i, total_income)
                print(f"Your total balance is: PHP␣
  ↪{calculate_balance(total_income, total_expense)}")
                continue

            elif user == 2:
                e = float(input("Please input your expenses:"))

                if e>calculate_balance(total_income, total_expense):
                    total_expense += e
                    print("Oh no! You have spent more than you have")
                else:
                    total_expense += e
                    print(f"You've spent PHP {total_expense}")
                    print(f"Your remaining balance is:␣
  ↪{calculate_balance(total_income, total_expense)}")
                    print("You still have money. Good job!")
                continue

            elif user == 3:
                print(f"You currently have Php {calculate_balance(total_income,␣
  ↪total_expense)}")

            elif user == 4:
                print("Goodbye!")
                break

            else:
                print("Woopsie! You made an oopsie!")

        except ValueError:
            print("Woopsie! You made an oopsie!")

main_prog()
```

```
 Welcome to your personal finance manager!
 (1) Add to my wallet
 (2) Track expenses
 (3) Check Balance
 (4) Exit

How can I help you today?  1
Please input your income: 1000
```

```
Your total balance is: PHP 1000.0

 Welcome to your personal finance manager!
 (1) Add to my wallet
 (2) Track expenses
 (3) Check Balance
 (4) Exit

How can I help you today?  1
Please input your income: 1000

Your total balance is: PHP 2000.0

 Welcome to your personal finance manager!
 (1) Add to my wallet
 (2) Track expenses
 (3) Check Balance
 (4) Exit

How can I help you today?  2
Please input your expenses: 500

You've spent PHP 500.0
Your remaining balance is: 1500.0
You still have money. Good job!

 Welcome to your personal finance manager!
 (1) Add to my wallet
 (2) Track expenses
 (3) Check Balance
 (4) Exit

How can I help you today?  1
Please input your income: 2000

Your total balance is: PHP 3500.0

 Welcome to your personal finance manager!
 (1) Add to my wallet
 (2) Track expenses
 (3) Check Balance
 (4) Exit

How can I help you today?  3

You currently have Php 3500.0

 Welcome to your personal finance manager!
 (1) Add to my wallet
 (2) Track expenses
 (3) Check Balance
 (4) Exit
```

```
How can I help you today?  2
Please input your expenses: 500

You've spent PHP 1000.0
Your remaining balance is: 3000.0
You still have money. Good job!

 Welcome to your personal finance manager!
 (1) Add to my wallet
 (2) Track expenses
 (3) Check Balance
 (4) Exit

How can I help you today?  1
Please input your income: 1000

Your total balance is: PHP 4000.0

 Welcome to your personal finance manager!
 (1) Add to my wallet
 (2) Track expenses
 (3) Check Balance
 (4) Exit

How can I help you today?  3

You currently have Php 4000.0

 Welcome to your personal finance manager!
 (1) Add to my wallet
 (2) Track expenses
 (3) Check Balance
 (4) Exit

How can I help you today?  4

Goodbye!
```

[ ]: