

ISYS 350, Spring 22, Assignment 2, Due Date: Wednesday, 2/23/22

Part 1: This part practices the floor division (/) and modulus operator (%). Don't use the IF statement to solve this problem.

1 pound (lb) is equal to 16 Ounces (oz). Create a Python program that uses input statements to ask user to enter the measurement of two weights in pounds and ounces and compute the total weight in pounds and ounces. For example, the total weight of 3 pounds and 15 ounces and 5 pounds and 10.5 ounces is 9 pounds and 9.5 ounces (not 8 pounds and 25 ounces); and the total weight of 7 pounds and 2.6 ounces and 3 pounds and 5 ounces is 10 pounds and 7.6 ounces. Use the sample data to test your program. Since the ounces of a weight may contain decimals, you must use the float() function to convert the input to numerical value.

Copy the source code and paste to a Word document, and copy the output and paste it to the same Word document. Submit the Word document by email attachment.

Sample output 1:

**Enter pounds of weight 1:3
Enter ounces of weight 1:15
Enter pounds of weight 2:5
Enter ounces of weight 2:10.5
Total weight is: 9.0 pounds and 9.5 ounces.**

Sample output 2:

**Enter pounds of weight 1:7
Enter ounces of weight 1:2.6
Enter pounds of weight 2:3
Enter ounces of weight 2:5
Total weight is: 10.0 pounds and 7.6 ounces.**

Part 2:

Create a Python program that asks a user to enter an integer number of seconds, and the program displays the equivalent number of hours, minutes and seconds using. If the seconds entered is less than 60, your program should only display the seconds; if the seconds is a least 60 and less than 3600, your program should display minutes and seconds; if the second is at least 3600, your program should display hours, minutes and seconds. Use the following data to test your program:

**47 seconds: 47 seconds (don't show 0 hour and 0 minute)
645 seconds: 10 minutes, 45 seconds (don't show 0 hour)
7565 seconds: 2 hours, 6 minutes, 5 seconds**

Requirements:

- 1. Input validation: The number of seconds cannot exceed 86400. If it exceeds 86400 seconds, print a message: "Seconds cannot exceed 86400!"**
- 2. Use the if elifelse statement to solve this problem.**
- 3. Test your program with 47 seconds, 645 seconds, 7565 seconds, and 90000 seconds.**

Copy the source code and paste to a Word document, and copy the output and paste it to the same Word document. Submit the Word document by email attachment.

Sample output:

**Enter number of seconds: 57
57 seconds**

**Enter number of seconds: 650
10 minutes 50 seconds**

**Enter number of seconds: 7565
2 hours 6 minutes 5 seconds.**

**Enter number of seconds: 90000
Seconds cannot exceed 86400!**