**Week 1 problems and assignments**

**Problem 1 solved**

Write a program that asks the user to enter his or her name. The program should respond with a message that says hello to the user, using his or her name.

Input example:

Name: CodeGrade

Output example:

Hello CodeGrade

Helpful:

name = input("What is your name?: ")

age = int(input("How old are you?: "))

height = float(input("How tall are you?: "))

print("Hello "+name)

print("You are "+str(age)+" years old")

print("You are "+str(height)+"cm tall")

**Problem 2**

**Implement a program that given number of years as input prints the number of months and days as output.**

**Criteria:**

* **keep the problem simple**
* **no leap year**
* **each year is 365 days and 12 months**

**Input example:**

**Years: 5**

**Output example:**

**Months: 60, Days: 1825**

**Problem 3**

**Write a program that asks the user to enter the width and length of a room.  
Once the values have been read, your program should compute and display the area of the room.**

**Criteria:**

* **The length and the width will be entered as floating point numbers**

**Input example:**

**Width: 5  
Length: 5.5**

**Output example:**

**The Area of the Room: 27.5**

**Problem 4**

**An online retailer sells two products: widgets and gizmos.  
Write a program that reads the number of widgets and the number of gizmos in an order from the user.  
Then your program should compute and display the total weight of the order.**

**Criteria:**

* **Each widget weighs 75 grams**
* **Each gizmo weighs 112 grams**

**Input example:**

**Number of widgets: 10  
Number of gizmos: 1**

**Output example:**

**The Total Weight of the Order: 862 grams**

**Problem 5**

**Develop a program that reads a four-digit integer from the user and displays the sum of the digits in the number.**

**Input example:**

**3141**

**Output example:**

**3+1+4+1=9**

**Problem 6**

**Implement a program that a user enters number of days as input, and the program prints number of hours, minutes and seconds separately as output.**

**Input example:**

**Days: 1**

**Output example:**

**Hours: 24, Minutes: 1440, Seconds: 86400**

**Assignment 1**

**Implement a program that given number of years as input prints the number of months and days as output.**

**Criteria:**

* **keep the problem simple**
* **no leap year**
* **each year is 365 days and 12 months**

**Input example:**

**Years: 5**

**Output example:**

**Months: 60, Days: 1825**

**Assignment 2**

**The program that you create for this exercise will begin by reading the cost of a meal ordered at a restaurant from the user.  
Then your program will compute the tax and tip for the meal. Use your local tax rate when computing the amount of tax owing.  
The output from your program should include the tax amount, the tip amount, and the grand total for the meal including both the tax and the tip.**

**Criteria:**

* **Tip is 15 percent of meal amount (without the tax)**
* **Assume a local tax rate of 21 percent**
* **Round all numbers up to 3 decimals in the output (you can use round(<value>, 3) for this)**

**Input example:**

**Cost of the meal: 23.60**

**Output example:**

**Tax: 4.956 , Tip: 3.540 , Total: 32.096**

**Week 1 complete? Date:**