

Problem Set 02

March 29, 2022

Problem 1: Complex built-in types. Returning multiple values.

Write a function that takes as input a metric system measurement in centimeters and returns a measurement in imperial measures, in feet and inches.

A typical input/output from the function might look like this:

```
1 >>>Enter a measurement in centimeters: 180
2 >>>Someone 180.0 cm tall is 5' 10.9" tall.
```

(Reminder: the small numbers on the left are line numbers and not part of the required output.)

Here's a skeleton for you to use for your solution:

```
1 measure_in_cm = float(input("Enter a measurement in centimeters: "))
2
3 def convert_cm_to_imperial(measure_in_cm):
4     """ convert centimeters to imperial units
5         return feet and inches equivalent """
6     ### YOUR CODE GOES HERE ###
7
8     # CALL THE FUNCTION convert_cm_to_imperial and place
9     # the return values in the variables 'feet' and 'inches'
10
11     ### YOUR CODE GOES HERE ####
12
13 print(f"Someone {measure_in_cm} cm tall is {feet}' {inches}\" tall.")
```

Print the feet variable with no decimal places. Limit the inches printout to *one* decimal place.

Python functions can return only one thing. So you'll have to use some object that packs multiple values together into one thing. You might find 'unpacking' to be useful in this case.

General guidelines

Submit your problem set solution as code plus any comments. You should submit code in a .py file. Export as .py if you do your coding in a Jupyter notebook, but now would be a good time to get used to programming in console Python or Spyder. You may include comments in your .py file using Python's commenting syntax, or you can submit a separate text file (or Word or PDF document) with your commentary. No Pages documents will be accepted. Convert Pages documents to PDF before submitting.