

You will be writing and turning in four Python programs plus one summary file.

NOTE: You will be working with strings, integers and floating point decimal variables.

Write a program named **toCelsius.py** that:

1. defines two constant variables
 - a. `freezingF = 32;`
 - b. `toCRatio = 5/9;`
2. Prompts the user for a temperature to be converted from Fahrenheit to Celsius and stores the response in a variable (F).
3. Converts the temperature using the following formula:
 - a. $C = \text{toCRatio} (F - \text{freezingF})$
4. Displays the results.

Write a second program named **toFahrenheit.py** that:

1. defines two constant variables
 - a. `freezingF = 32;`
 - b. `toFRatio = 9/5;`
2. Prompts the user for a temperature to be converted from Celsius to Fahrenheit and stores the response in a variable (C).
3. Converts the temperature using the following formula:
 - a. $F = (\text{toFRatio}) * C + \text{freezingF}$
4. Displays the results.

Write a program named **toCm.py** that:

1. defines one constant variable
 - a. `toCm = 2.54;`
2. Prompts the user for a temperature to be converted from inches to Cm and stores the response in a variable (InLength).
3. Converts the length using the following formula:
 - a. $\text{CmLength} = \text{toCm} * \text{InLength}$
4. Displays the results.

Write a program named **toInches.py** that:

1. defines one constant variable
 - a. `toCm = 2.54;`
2. Prompts the user for a temperature to be converted from inches to Cm and stores the response in a variable (CmLength).
3. Converts the length using the following formula:
 - a. $\text{InLength} = \text{CmLength} / \text{toCm}$
4. Displays the results.

You will also write up a summary (**HW3summary.txt**) of the assignment and answer the following question(s).

1. What gave you trouble in this assignment?
2. Did this give you ideas of how you'd like to do it better?
3. Why did we use toCm as the constant in toInches.py? Is that correct?

Make sure that you submit all three files upon completion.