

COMP B10 – INTRO TO PROGRAMMING METHODOLOGIES USING PYTHON

Assignment #2 (Conversion Program)

Create the Python program that will allow users to select the type of conversion to perform and then perform one of these conversions.

- Fahrenheit to Celsius
- Miles to Kilometers
- Pounds to Kilograms

Your program should be able to create a run that looks EXACTLY like the sample run.

Your program should perform the following:

1. Print “CONVERSION PROGRAM” as your heading.
2. Print a blank line.
3. Display a menu of conversions that can be done by the program.
4. Ask the user which conversion to perform. Make sure to handle character case conversions.
5. If the user selects a valid option then perform the selected conversion and display the result, otherwise print an error message.
6. The formula for converting Fahrenheit to Celsius is: subtract 32 from the temperature in Fahrenheit. Divide the result by 1.8.
7. The formula for converting Miles to Kilometers is: divide Miles by 0.621371192237.
8. The formula for converting Pounds to Kilograms is: divide Pounds by 2.2.
9. Round and print all calculated answers to three decimal places.
10. Terminate the program in the normal method.

Additional notes:

- You must use the program template for your program.
- Upload a copy of your program source code to Canvas AND turn in a printed copy of your source code to me.
- Your messages and prompts must look EXACTLY like those in the sample. Duplicate all blank lines and spacing.

Sample runs on back.

CONVERSION PROGRAM

T = Convert Fahrenheit to Celsius
D = Convert Miles to Kilometers
W = Convert Pounds to Kilograms

Select conversion to perform ('T'emperature, 'D'istance, 'W'eight)? t

Please enter the temperature in FAHRENHEIT: 212
212.0 fahrenheit is 100.000 celsius.

Run complete. Press the Enter key to exit.

CONVERSION PROGRAM

T = Convert Fahrenheit to Celsius
D = Convert Miles to Kilometers
W = Convert Pounds to Kilograms

Select conversion to perform ('T'emperature, 'D'istance, 'W'eight)? D

Please enter the distance in MILES: 123
123.0 miles is 197.949 kilometers.

Run complete. Press the Enter key to exit.

CONVERSION PROGRAM

T = Convert Fahrenheit to Celsius
D = Convert Miles to Kilometers
W = Convert Pounds to Kilograms

Select conversion to perform ('T'emperature, 'D'istance, 'W'eight)? w

Please enter the weight in POUNDS: 100
100.0 pounds is 45.455 kilograms.

Run complete. Press the Enter key to exit.

CONVERSION PROGRAM

T = Convert Fahrenheit to Celsius
D = Convert Miles to Kilometers
W = Convert Pounds to Kilograms

Select conversion to perform ('T'emperature, 'D'istance, 'W'eight)? g

Error - Invalid option selected. You may only enter T, D, or W.

Run complete. Press the Enter key to exit.