

EE103 Introduction to Programming

Homework Assignment #3

Due Date: Nov 18, 2014 (11:59pm)

In this homework, you are going to write a program that prints a list of temperature values in Celcius, Fahrenheit and Kelvin formats.

Your program should ask for the values of 3 variables (`Min_Celcius`, `Step_size`, `Num_Lines`) using `printf` & `scanf` commands. As illustrated in the example below, the program should display temperature values with Celcius values starting from `Min_Celcius`, increment its value by `Step_size` and do this for `Num_Lines` times. For each Celcius value, corresponding Fahrenheit and Kelvin values are also displayed. After the list is printed your program should not exit and it should start over once again. If a Celcius value less than -273 is entered the program should gracefully exit with a proper message.

Save and submit your program as instructed in the cms.iyte.edu.tr site.

Example: When the values `Min_Celcius=0`, `Step_size=5`, `Num_Lines=6` are entered in the command line the program should print lines similar to the following:

>Enter Minimum Celsius Value, Step Size, Number of Lines:

>0, 5, 6

	Celsius	Fahrenheit	Kelvin
>			
>			
>	0	(?)	(?)
>	5	(?)	(?)
>	10	(?)	(?)
>	15	(?)	(?)
>	20	(?)	(?)
>	25	(?)	(?)
>			

> Enter Minimum Celsius Value, Step Size, Number of Lines:

>-300, 0, 0

> Thanks for using this program...Exiting now...

>

Of course, (?) values should be calculated and printed by your program.

Hint: Use “**for** loop” for calculating and displaying temperature values, use a “**while** loop” to create an infinite loop that can be broken when the `Celsius<273` condition is met.

Note: The solution should be your own individual work.