Programming Assignment #4

Write a C program that prompts the user to enter a line of text (up to 50 characters). It should then convert the text entered to uppercase letters and then to lowercase letters.

Your program should use a character array: **text[51]** to store text. It should use function safer_gets() to prompt the user for the line of text.

Your program must use pointer notation and pointer math (i.e. no array index notation other than in the declaration section).

The dialog with the user must look like:

Enter a line of text (up to 50 characters):
ThiS is A LiNe of teXt with UPPER and lower CaSe charactERS

The line of text in uppercase is:
THIS IS A LINE OF TEXT WITH UPPER AND LOWER C

The line of text in lowercase is:
this is a line of text with upper and lower case c

Note: The **blue** text represents the "output" from your program and is shown for clarity only here. It is not required that your output be in this color. (Do not even attempt to try!). Also note that what the user types in is indicated by the bolded black text above. Again, for clarity only. (Notice that text is truncated once the 50 character limit has been reached - this would be handled in function safer_gets).

Hints:

- Your program requires 2 loops (either for or while). One to convert and display the string in uppercase letters, and the other to convert and display the string in lowercase letters.
- Your program should use the C standard library functions ***toupper*** in one of the loops, and ***tolower*** in the other loop, to convert the string. Both of these functions are found in the header file **ctype.h**.
- **You do not need to convert function safer_gets() to pointer notation.**

Really BIG hint:

You can click on the "**Assig 4 Hint"** link which provides a solution to the program using "array" notation. You can use it as a guide if you so choose.
Note: An arrow symbol (->) at the beginning of a particular line of code indicates that the line of code needs to be modified for pointer notation.

Good luck!