

Week 5 Practice Problems

#1. Read one string from the user. Then, swap cases and print the result. In other words, convert all lowercase letters to uppercase letters and vice versa. You should solve this question twice.

- a) There is a `str` method that will do this for you and so after the input just call it.
- b) But a) is not much of an exercise, so you should also do it without calling that function!

#2. Get one string from the user, remove all exclamation and question marks from it, and output the resulting string. Do not use any special string methods.

Example:

Input: Hello!

Output: Hello

Input: How are you?

Output: How are you

#3.

a) Prompt the user to enter their full name and, using only string comparison functions, decide if the string starts with your first name. If it does, print out “How did you know my name?”. If it doesn’t, print out “It’s rude to not know my name.”

b) Write a function that takes two strings and returns `True` if the two “match”, where this time “matching” is not case sensitive. (So “Smith” and “smith” match). Redo part a) using this function.

#4. Redo #1 from Week 3 but this time you can do it with an integer of any length. That is, write a function that takes in a positive integer of any size and returns the “flipped” version (that is, with its digits reversed). For example:

Enter a positive number less than 1000: **90177**

That number flipped is 77109

a) Use integers to do it. (This is an extension of what you did in Week 3).

b) Use string functions to do it. Note that the function should still have a type contract of `(int) -> int`. It is only inside the function that you are allowed to use strings.