## Problem #5

## ROT13

According to Wikipedia, ROT13 ("rotate by 13 places") is a simple Caesar cipher used for obscuring text by replacing each letter with the letter thirteen places down the alphabet. A becomes N, B becomes O, and so on up to M, which becomes Z, then the sequence reverses: N becomes A, O becomes B, and so on to Z, which becomes M.

The algorithm is used in online forums as a means of hiding joke punchlines, puzzle solutions, movie and story spoilers, and offensive materials from the casual glance. A noticeable feature of this cipher is that it is symmetrical; that is, to undo ROT13, the same algorithm is applied, so the same code can be used for encoding and decoding.

Your program must be able to apply the ROT13 cipher to its input, and output the result only.

upper case letters A through Z need to be considered, and spaces must be left untouched, non-alpha-numeric characters can be ignored (punctuation, special characters, etc).

Example 1:

Input string: EXAMPLE ONE Output string: RKNZCYR BAR

Example 2:

Input string: ENIVAR Output string: RAVINE