**8.1 Assignment 1, due Thursday 2018-02-08, at 11:00pm**

8.1.2 Pig Esperanto

For this assignment, you are to implement an encoder for *Pig Esperanto*, a simplified version of the language game *Pig Elvish*, which in turn is similar to [Pig Latin](https://en.wikipedia.org/wiki/Pig_Latin).

Pig Esperanto works by translating a text one word at a time. For the purposes of this assignment, a word consists of a consecutive sequence of characters for which isalpha, defined in the include file ctype.h, returns true. Any characters for which isalpha returns false should be passed through unmodified.

For each input word:

1. Move the first letter to the end.
2. Add the letters "an" to the end of any word of three letters or less, and "o" to the end of any longer word.
3. Make the new first letter of the word match the case of the old first letter of the word. Make the letter that was moved lowercase if it is not still the first letter. Do not change the capitalization of any other letters.

Capitalization can be tested using the isupper and islower macros, and modified using the toupper and tolower macros. Like isalpha, these are all defined in ctype.h.

8.1.3 Your task

You are to write a program encode.c that takes an input from stdin, encodes it using the above rules, and writes the result to stdout.

For example, given the input

I \*REALLY\* like Yale's course-selection procedures.

Your program should output

Ian \*EALLYro\* ikelo Aleyo'san ourseco-electionso rocedurespo.