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EE422C A1 Analysis & Design

The assignment asks us to translate a text file from words into pig latin. We are given a text file that is broken up for us, line by line, by the Translator class. In order to translate each word individually I plan on breaking the line into an array of strings by splitting on whitespace. Then I will go through each of the conditions and follow the plan from there (see below). I will take the beginning consonants if there are any, and store (the word - the consonants) + consonants + "ay" in an array of strings. Once I have reached the end, I will return the array as one string. Corner cases are handled as follows: if there is a hyphen, a flag is set and the first word is handled as usual. A hyphen is added if the hyphen flag is set. The next word is handled as usual. if there is an apostrophe it is basically ignored. If there is a symbol that is considered punctuation I check if it is within the word or not. If it is not, I print the punctuation and remove it from the word and then translate the word. If it is, I print the word as-is without translating. If there is a symbol that is not punctuation I print the word as-is without translating.

Our initial input is a line. We must break this line up into individual words. Then there are seven possible types of word that we will have to deal with:

- 1) Words beginning with a single consonant
- 2) Words beginning with multiple consonants
- 3) Words beginning with any number of vowels
- 4) Words that are actually two hyphen separated vowels
- 5) Words that contain "/" " and are considered contractions
- 6) Words that contain symbols that are specified as punctuation
- 7) Words that contain symbols that are unspecified

For each of these words we must take a specific action:

- 1) Move the consonant to the end and append "ay"
- 2) Group the consonants together, move the group to the end, and append "ay"
- 3) Simply append "ay"
- 4) Break the word at the hyphen and treat them like two separate words (add a hyphen between their translations)
- 5) Treat as a normal word, the apostrophe is not counted as anything
- 6) We are allowed to do whatever, I have chosen to print the word as-is
- 7) Print the word as-is.

## RETURN THE TRANSLATED STRING

