

# TDD LAB 1

**Intro:** Pig Latin is a children's word game in English where starting consonants are flipped to the ends of words and -ay added to each word. Hello World would be ellohay orldway in Pig Latin, for instance. Many languages have games similar to this--read more at <http://mentalfloss.com/article/50242/pig-latins-11-other-languages>

**Task:** Use TDD practices to build a function that translates from English to Pig Latin.

## Build Specifications

1. Translation must all be done in a **translate** function that takes a string parameter and returns the translated Pig Latin string.
2. The translation functionality must be developed with TDD using tests on the **translate** function.
3. If desired, you may also create other helper functions and optionally test them.

## Additional Build Specifications

1. Convert each word to lowercase before translating.
2. If a word starts with a vowel, just add "way" onto the ending.
3. If a word starts with a consonant, move all of the consonants that appear before the first vowel to the end of the word, then add "ay" to the end of the word.

## Hints

- Treat "y" as a consonant.
- Start with the simplest cases and work up, for example...
  - a. words that start with vowels... write tests for several different starting vowels
  - b. words that start with vowels with capital letters are converted to lowercase
  - c. words that start with one consonant... write tests for the second letter being several different vowels
  - d. words that start with two consonants
  - e. words that start with more consonants

## Extended Challenges

- Keep the case of the word, whether its uppercase (WORD), title case (Word), or lowercase (word).
- Allow punctuation in the input string.
- Translate words with contractions. Ex: can't become an'tcay
- Don't translate words that have numbers or symbols. Ex: 189 should be left as 189 and hello@grandcircus.co should be left as hello@grandcircus.co.
- Check that the user has actually entered text before translating.
- Make the function take a phrase or sentence instead of a single word, and then find the Pig Latin for each word in the line.
- In a separate JS file, use the [prompt-sync](#) NPM package to prompt the user for a word or phrase. Call your function to translate it, then log the result.

## Test Cases

Start with these sample test cases, then you must create more of your own (see Grading Criteria)

- Words starting with different vowels
  - `translate("apple")` → "applyway"
  - `translate("else")` → "elseway"
- Words starting with one consonant
  - `translate("giraffe")` → "iraffegay"

Remember: Never delete your old tests. Keep adding more and more.

## Grading Criteria

1. At least five (5) tests for words starting with different vowels.
  - a. These tests are correct and pass.
2. At least two (2) tests for words starting with one consonant.
  - a. These tests are correct and pass.
3. At least one (1) test for words starting with two consonants.
  - a. These tests are correct and pass.
4. At least one (1) test for words starting with three consonants.
  - a. These tests are correct and pass.
5. At least one (1) test checking for lower case conversion.
  - a. These tests are correct and pass.