

# Project 5: Pig Latin Translator

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## 1 Description

This script implements a Pig Latin translator. The goal is to translate an English sentence into Pig Latin. Pig Latin is a language game where words are altered by a set of rules. If a word starts with a vowel, "yay" is added to the end. If a word starts with a consonant, all the consonants before the first vowel are moved to the end of the word and "ay" is added. The script uses a function called `pig_latin` to perform the translation for a single word. It then uses another function called `translate_to_pig_latin` to translate an entire sentence by splitting it into words and applying the `pig_latin` function to each word. The translated sentence is printed as the output. The script utilizes string manipulation, loops, conditionals, and functions.

## 2 Code

```
1  #!/usr/bin/env python3
2  # -*- coding: utf-8 -*-
3  """
4  Created on Thu Jun 22 08:46:21 2023
5  Modified on Wed Jun 22 10:00:00 2023
6  @author: abrahamreines
7  """
8
9  def pig_latin(word):
10     vowels = 'aeiou'
11     if word[0] in vowels:
12         return word + 'yay'
13     elif word[0] == 'y':
14         return word[1:] + word[0] + 'ay'
15     else:
16         consonant_cluster = ''
17         for letter in word:
18             if letter not in vowels:
19                 consonant_cluster += letter
20             else:
```

```

21         break
22         return word[len(consonant_cluster):] +
           consonant_cluster + 'ay'
23
24 def translate_to_pig_latin(sentence):
25     words = sentence.split()
26     pig_latin_words = [pig_latin(word.lower()) for word in
27                        words]
28     return ' '.join(pig_latin_words)
29
30 # Ask the user for input
31 user_input = input("Enter an English sentence: ")
32 pig_latin_sentence = translate_to_pig_latin(user_input)
33 print("Pig Latin translation:", pig_latin_sentence)

```

### 3 Example Output

Enter an English sentence: write a program named pig.py that translates a string input by the user from english to pig latin

Pig Latin translation: itewray ayay ogrampray amednay ig.pypay atthay anslatestray ayay ingstray inputyay byay ethay useryay omfray englishyay otay igpay atinlay

### 4 Code Explanation

The script defines two functions: `pig_latin` and `translate_to_pig_latin`. The `pig_latin` function takes a word as input and applies the rules of Pig Latin translation to convert it. It checks if the word starts with a vowel, and if so, adds "yay" to the end. If the word starts with a consonant or "y", it moves the consonant cluster or "y" to the end and adds "ay". The `translate_to_pig_latin` function takes a sentence as input, splits it into words, applies the `pig_latin` function to each word, and joins the translated words back into a sentence.

The script then prompts the user to enter an English sentence and calls the `translate_to_pig_latin` function to translate it. The translated sentence is printed as the output.

The script uses string manipulation, loops, conditionals, and functions to implement the translation logic and provide a user-friendly interaction.