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Character trigrams

A character trigram is a group of three consecutive characters as they appear in a word. For example, the word "hello" contains the trigrams "hel", "ell", and "llo".

1. Write a function that receives a word and returns a list of its character trigrams.

```
>>> trigrams('hello')
['hel', 'ell', 'llo']
>>> trigrams('crocodile')
['cro', 'roc', 'oco', 'cod', 'odi', 'dil', 'ile']
>>> trigrams('hi')
[]
```

2. Write a program that reads a sequence of words and prints the pairs of consecutive words in the sequence that have at least one trigram in common. The program must use the trigrams function defined above.

Hint: It may be useful to define another function that checks whether two lists of trigrams have at least a common element

Input

The input is a sequence of words, all of them contain only lowercase letters.

Output

The output is a list of word pairs that are consecutive in the input sequence and have some common trigram.

Problem information

Author : ProAl Generation : 2019-11-29 09:49:42

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