Challenge 4: Word Formation From a Dictionary Using Trie

This is a word matching problem regarding tries.

We'll cover the following ⌄

- Problem Statement
  - Input
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  - Sample Output
- Coding Exercise

Problem Statement

You have to implement the `is_formation_possible()` function which will find whether a given word can be formed by combining two words from a dictionary. We assume that all words are in lower case.

Input

A dictionary and a query word containing lowercase characters.

Output

Returns `True` if the given word can be generated by combining two words from the dictionary.

Sample Input

```
dictionary = ["the", "hello", "there", "answer", "any",
              "by", "world", "their", "abc"]
word = "helloworld"
```

Sample Output

```
True
```

Dictionary:

the	hello	there	answer	any	by	world	their	abc

Word to be formed: helloworld   **Output: True!**

Coding Exercise

Design a step-by-step algorithm first before jumping on to the implementation. Try to think whether a recursive or an iterative approach would be better.

If you get stuck, you can always refer to the solution review.

Good luck!

main.py

Trie.py

TrieNode.py

```python
from Trie import Trie
from TrieNode import TrieNode
# Create Trie => trie = Trie()
# TrieNode => {children, is_end_word, char,
# mark_as_leaf(), unmark_as_leaf()}
# get_root => trie.get_root()
# Insert a Word => trie.insert(key)
# Search a Word => trie.search(key) return true or false
# Delete a Word => trie.delete(key)


def is_formation_possible(dictionary, word):
    # Write your code here
    pass
```

✅ Mark as Completed

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Ask a Question
(https://discuss.educative.io/tag/challenge-4-word-formation-from-a-dictionary-using-trie__trie__data-