Generating Spelling Suggestions

Algorithm walk through

By the end of this video you will be able to…

- Describe a detailed algorithm for generating spelling suggestions for misspelled words

Add the misspelled word to a queue
While not enough words generated and queue not empty:
    Remove the first string from the queue
    Generate "1 away" strings from the first string in the queue
    Add these to the queue
    Preserve those that are actual words in a separate list

queue:

suggestions:

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queue: speel

suggestions:

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speel

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suggestions:

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speel

queue: apeel   sbeel   speek   peel   ...

suggestions:

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speel

queue: apeel sbeel speek peel …

suggestions: peel spell …

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queue: apeel sbeel speek peel …

suggestions: peel spell …

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apeel

queue: sbeel   speek   peel   …

suggestions: peel spell …

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apeel

queue: sbeel   speek   peel   ...   cpeel   apeal   apel   ...

Optional Optimization: Keep track of strings you've seen and don't add them again

suggestions: peel   spell   ...

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apeel

queue: sbeel speek peel … cpeel apeal apel …

suggestions: peel spell …

How do we order the list of suggestions?