

Autocomplete with Tries explanation

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0.1 Problem Statement

Create a Trie datastructure and use it to make an autocomplete function given some words.

0.1.1 Design Considerations

A dictionary was used to implement the trie as it proved to be quite easy to visualize and implement tries using a dictionary.

0.1.2 Space and Time Complexity

Due to the dictionary being used the time complexity for accessing, deleting and searching for a trie is $O(n)$.

The space complexity for a trie creation is $O(m*n)$, where m is the number of nodes created and n is the average length of keys in the trie.