I'm thinking using trie to implement the autocomlplete homeworks. For example, using the provided words, ["hello", "high", "seattle", "seatac", "see", "hollow", "how"] and stored them into trie, .insert(words); In the insert step, it will break the word string into char array and keep them into a tree like structure. At the end, calling the prefix of the word for autocomplete.

When calling the first few letter(char) then it will print out the route of that specific letter’s rest of the children for every possible words

(skip)

t to e

for

“seattle”

(skip)

l to w

for

“hollow”

(skip)

g to h

for “high”

(skip)

l to o for

“hello”

For time complexity, I’m not too sure since I’m still learning how to calculate it. I think the Big-O notation for this design is O(n) because it accessing every individual route for the chosen letter for n time (the length of the word).