

Interview Question

You are given a Trie (a tree in which each Node contains a character of a word inserted into it) populated with n words. The class definitions of the Node and Trie classes are as follows:

Node:

```
class Node:
    def __init__(self, cargo, end=False):
        self.cargo = cargo
        self.next = {}
        self.end = end
```

Trie:

```
class Trie:
    def __init__(self):
        self.root = Node('.')

    def insert(self, word):
        current = self.root

        for letter in range(len(word)):
            if current.next.has_key(word[letter]):
                current = current.next[word[letter]]
            else:
                if letter == len(word)-1:
                    current.next[word[letter]] = Node(word[letter])
                    current.next[word[letter]].end = True
                else:
                    current.next[word[letter]] = Node(word[letter])
                    current = current.next[word[letter]]
```

Create an Auto Complete system that gives word recommendations given an inputted string. For example, if the Trie contained the words “dog”, “dad” and “dogma” and the user entered “d” the output should yield “dog”, “dogma”, “dad” (order doesn’t matter and you can output the result in the form of a list or on new lines)