



Trie Implementation

Frame 50: Process

```
current_key=apple, current_char=e, current_node=node_4, operation=search, result=processing
```

Pseudocode:

```
class TrieNode:
    def __init__(self):
        self.children = {} #
        self.count = 0 #
        self.end_count = 0 #

class Trie:
    def __init__(self):
        self.root = TrieNode()

    def insert(self, word):
        node = self.root
        for char in word:
            if char not in node.children:
                node.children[char] = TrieNode()
            node = node.children[char]
            node.count += 1
        node.end_count += 1

    def search(self, word):
        node = self.root
        for char in word:
            if char not in node.children:
                return False
            node = node.children[char]
        return node.end_count > 0

    def delete(self, word):
        node = self.root
        for char in word:
            if char not in node.children:
                return False
            node = node.children[char]
            node.count -= 1
        node.end_count -= 1
        return True
```

Variables

current_key apple

current_char e

current_node node_4

operation search

result processing