

Problem – 2 Trie - 2

class TrieNode:

```
def __init__(self):  
    self.children = {}  
    self.is_end_of_word = False  
    self.word_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.word_count += 1  
    node.is_end_of_word = True
```

```
def erase(self, word):  
    node = self.root  
    for char in word:  
        node = node.children[char]  
        node.word_count -= 1  
    node.is_end_of_word = False
```

```
def countWordsEqualTo(self, word):  
    node = self.root  
    for char in word:
```

```
        if char not in node.children:
            return 0

        node = node.children[char]

    return node.word_count if node.is_end_of_word else 0
```

```
def countWordsStartingWith(self, prefix):
    node = self.root
    for char in prefix:
        if char not in node.children:
            return 0
        node = node.children[char]
    return node.word_count
```

```
trie = Trie()
trie.insert("samsung")
trie.insert("samsung")
trie.insert("vivo")
trie.erase("vivo")
```

```
print(trie.countWordsEqualTo("samsung"))
print(trie.countWordsStartingWith("vi"))
```



```
input
2
0

...Program finished with exit code 0
Press ENTER to exit console.█
```