Tayslement Trie (Prefix Tree)

What to build:

-a Vrée Voole that store:

children: 26-way painters (sels (array of seize 26 & an unordered map < chas, Trie Dode+>)

is End: book fleg marking end-g- word.

· e hie with methods:

ment (word)

· narch (word)

· Morts With (prefix)

Design chrices: 1

· Ang [26] children

fostest 8 memory-predictable - wester space if many nodes are sparse. · Hash I map children

saves space for sparse tries - a time bit slower dere to hashing.

Smolices & helpers:

moder for a letter : rolt = ch - 'a'

· when walking: if child absent - create for insert, fail for rearch! storet With.

Desations (step-lay-step): [insert (word)

1. mole = 1298

1, for each chin word:

· computs child under / lookup

· if child mussing - create new node and link

·move mode = child

3. after logs: node.is End = true

search (wool)
1. mode=199t
2 for each chin word:
if child missing - seturn false
· more to child
3. return mode is End (must be end of word, not just a prefix).
starts Will, (prefex)
1. same walk as march
2. but at the end, don't check is End, if you didn't break early,
return true
(Complexity:
- get L be the length of the string / prefix.
- get L be the length of the strong / prefix. invert, rearch, starts Weth are all O(L) time.
- Jace: total modes ≤ sum of inserted word lengths.
Petfells to avoid:
Don't return true in rearch just because a path exists - must check is and
Don't return true in warch just because a path exists - must check is and. Handle empty strings of the platform might pass them (this problem's
contraints say length ≥ 1. 10 you me scope).
constraints say length ≥ 1, so you me sofe). Uther essay array (26] initialize children to mullet (or equivalent)
constraints say length ≥ 1, so you he safe). Uther essay array (26), initialize children to mellet (or equivalent).
constraints say length ≥ 1, so you he safe). 'Uther essay assay (26), initialite children to millet (or equivalent).
constraints say length > 1, so you he safe). Uthern essing array (26), instialite children to mullpti (or equivalent).
comtraints say length ≥ 1, so you in sofe). 'Uther essing assay (26), initialite children to mellet (or equivalent).
comtraints say length ≥ 1, so you he sofe). 'Uther essing assay (26), initialize children to mulpte (or equivalent).
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Comtraints say length ≥ 1, so you me sofe). Uthern essing array (26), instrablite children to mulpte (or equivalent).
comtraints say length ≥ 1, so you in sofe). 'Uther essing array (26), initialite children to mulpte (or equivalent).
comtraints say length ≥ 1, so yaine safe). 'When every array (26], initialite children to mulpto (or equivalent).
Contraint say length > 1, so you in sofe). When using among (26), instialite children to mulpt (or equivalent).