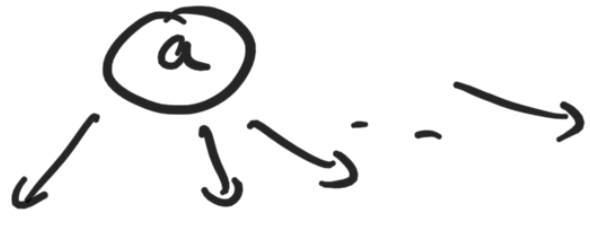
Trie / Prefix tree

→ Characters stored in each node

→ Each path down tree may represent a word

→ If node is "*", indicates word is complete



upto 27 children

↑

(a, b, .. , z , *)

data structure for easy look up if a string is a prefix of a valid word

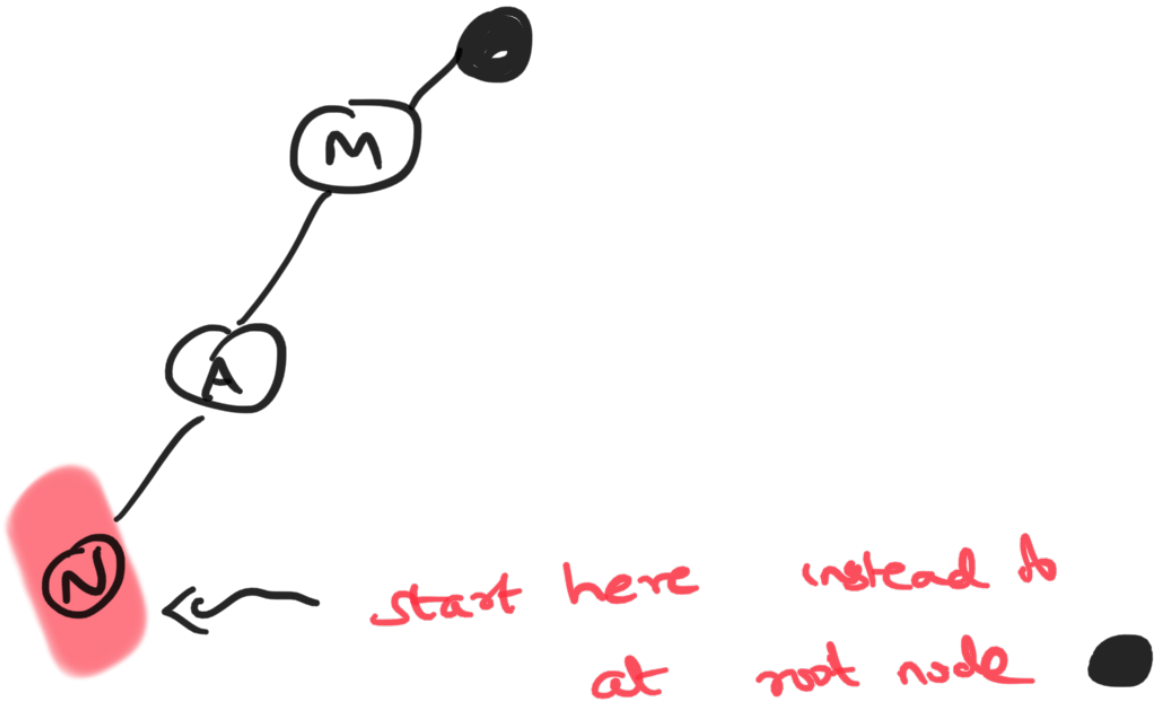
look up if s is a valid prefix

→ O(|s|) time

(ie) see if ∃ path "— s — ...."

prefixes repeatedly, sometimes pass a good starting node (instead of root node))

Check if MANY, MANIPULATE, MANNER etc are prefixes..



⚠ Check if a string is a key in a dictionary

~~O(N)~~ O(|S|)

as need to compute hash(S) to see if in dictionary...