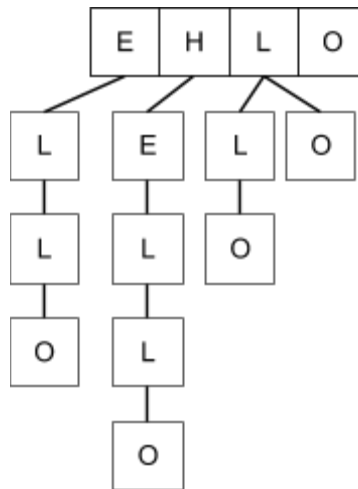


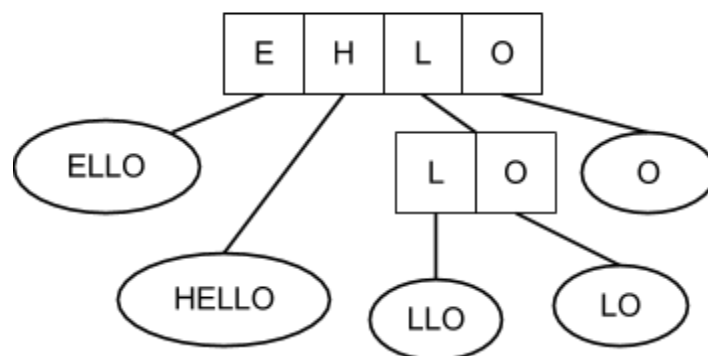
CS 240 Tutorial - Suffix Tries and Trees

A suffix trie is an uncompressed trie on all the suffixes of a word. So if we wanted to search on the string “HELLO” we can add it to a suffix trie and search on it in $O(m)$ where m is the length of the pattern we are searching for.

To create a suffix trie over “HELLO” simply insert all the suffixes of the strings into a trie. So we would add “HELLO”, “ELLO”, “LLO”, “LO”, and “O”. This way if we were searching for the strings EL we could find it with only two probes. Here is what the suffix trie would look like.



For a Suffix Tree we simply compress exactly like we did for Patricia Tries, this saves space. So the Suffix Tree of the above Suffix Trie would look as follows:



This is then further compressed by only keeping track of string indices instead of storing complete strings in the leaves.