

Nucleus

Java Foundation & Data Structures

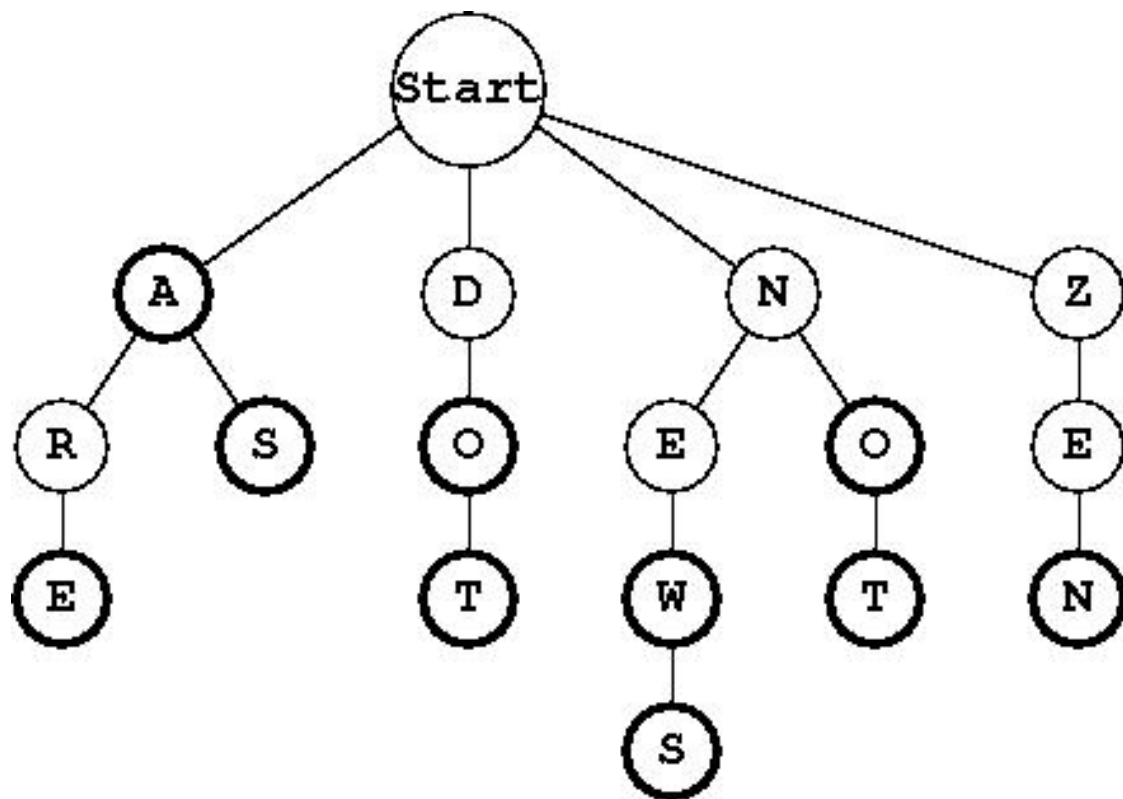
Lecture 22 : Tries



Friday, 14 July 17

Trie

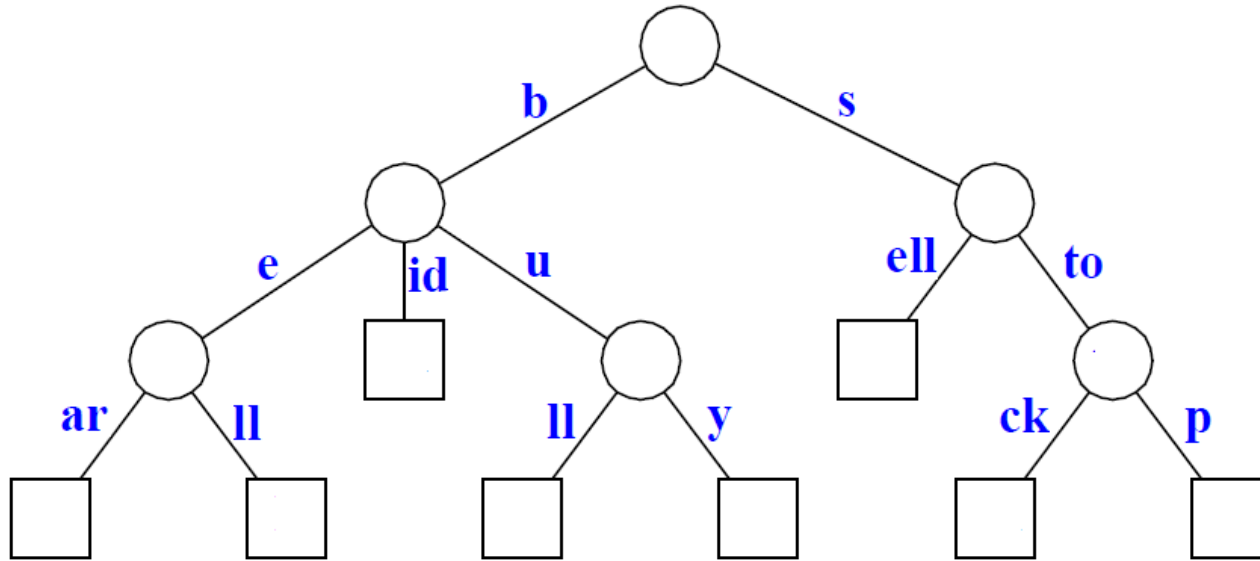
Trie



Lets Implement Trie Class

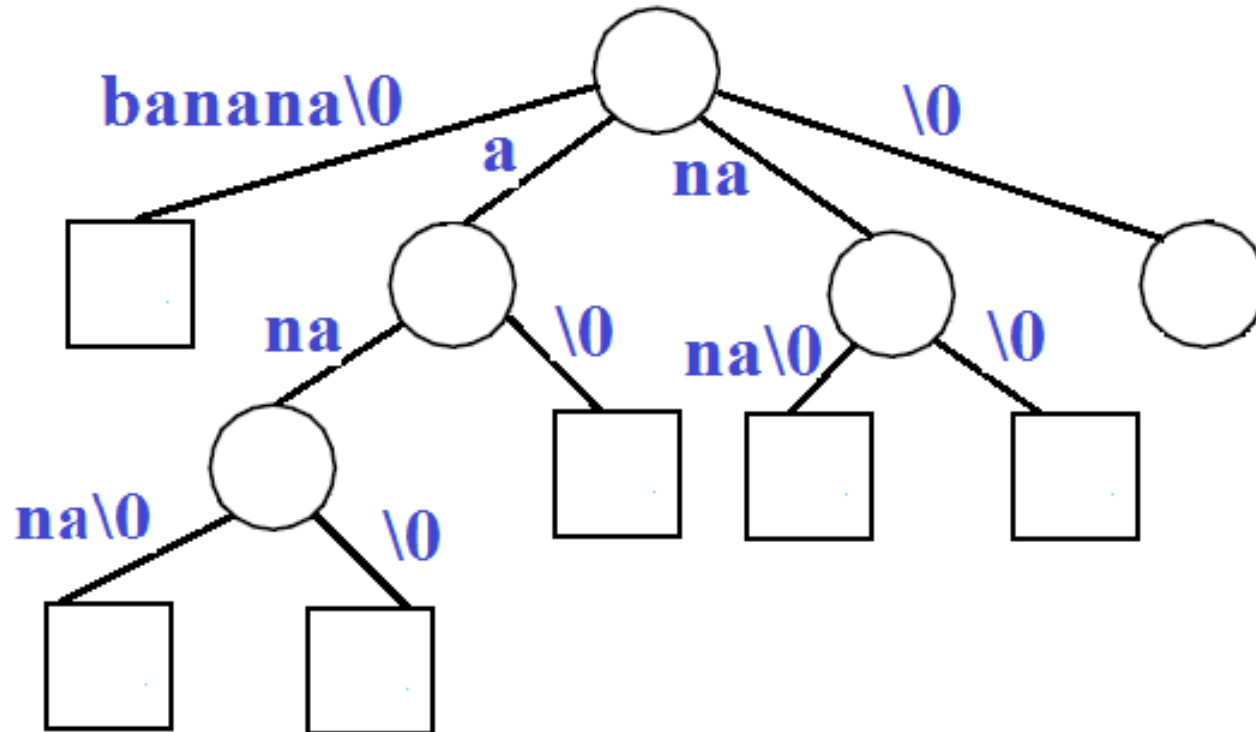
Compressed Tries

Trie



Suffix Tries

Trie



Text Compression

Huffman Coding

BT : King's test

A king wants his daughter to marry the smartest of 3 extremely intelligent young princes, and so the king's wise men devised an intelligence test. The princes are gathered into a room and seated, facing one another, and are shown 2 black hats and 3 white hats. They are blindfolded, and 1 hat is placed on each of their heads, with the remaining hats hidden in a different room. The king tells them that the first prince to deduce the color of his hat without removing it or looking at it will marry his daughter. A wrong guess will mean death. The blindfolds are then removed. You are one of the princes. You see 2 white hats on the other prince's heads. After some time you realize that the other prince's are unable to deduce the color of their hat, or are unwilling to guess. What color is your hat?

Note: You know that your competitors are very intelligent and want nothing more than to marry the princess. You also know that the king is a man of his word, and he has said that the test is a fair test of intelligence and bravery.

BT : Random number generator



Given a random number generator which generates numbers between 1 to n . What is the probability that 10 executions of this function will generate a strictly increasing sequence?



Thank you

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