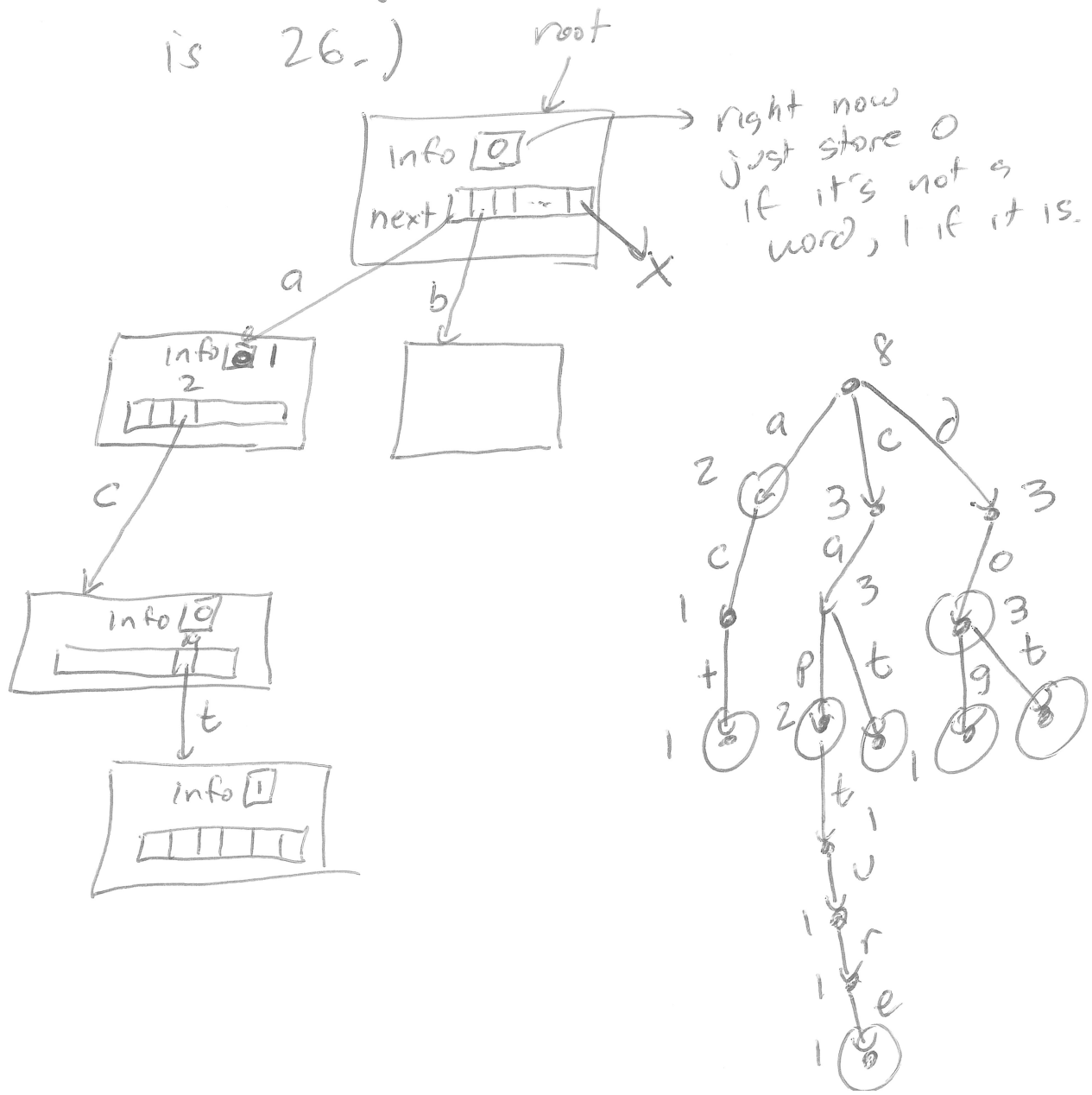


COP 3502 - 11/3/21

- ① Monday's Notes have PS picture.
- ② Tries - alternate way to store a dictionary.

Works well if all words are pretty short + shared prefixes are common.

Tree where each link designates a letter (# of ptrs in a single node is 26.)



```

typedef struct trienode {
    int isWord;
    struct trienode* next[26];
} trienode;

```

INSERT (word, k ^{letter I am on})
 SEARCH

What else might we want to store?

① sum of # words in the subtree.

⇒ Find k^{th} alphabetic word

Eg. $k=5$, since 2 start a, not a
 since 3 start c, go this way
 since $2+3 \leq 5$.
 go to a, looking 3rd word
 since only 2 start ap, go to
 5th word $\Rightarrow$ cat.

