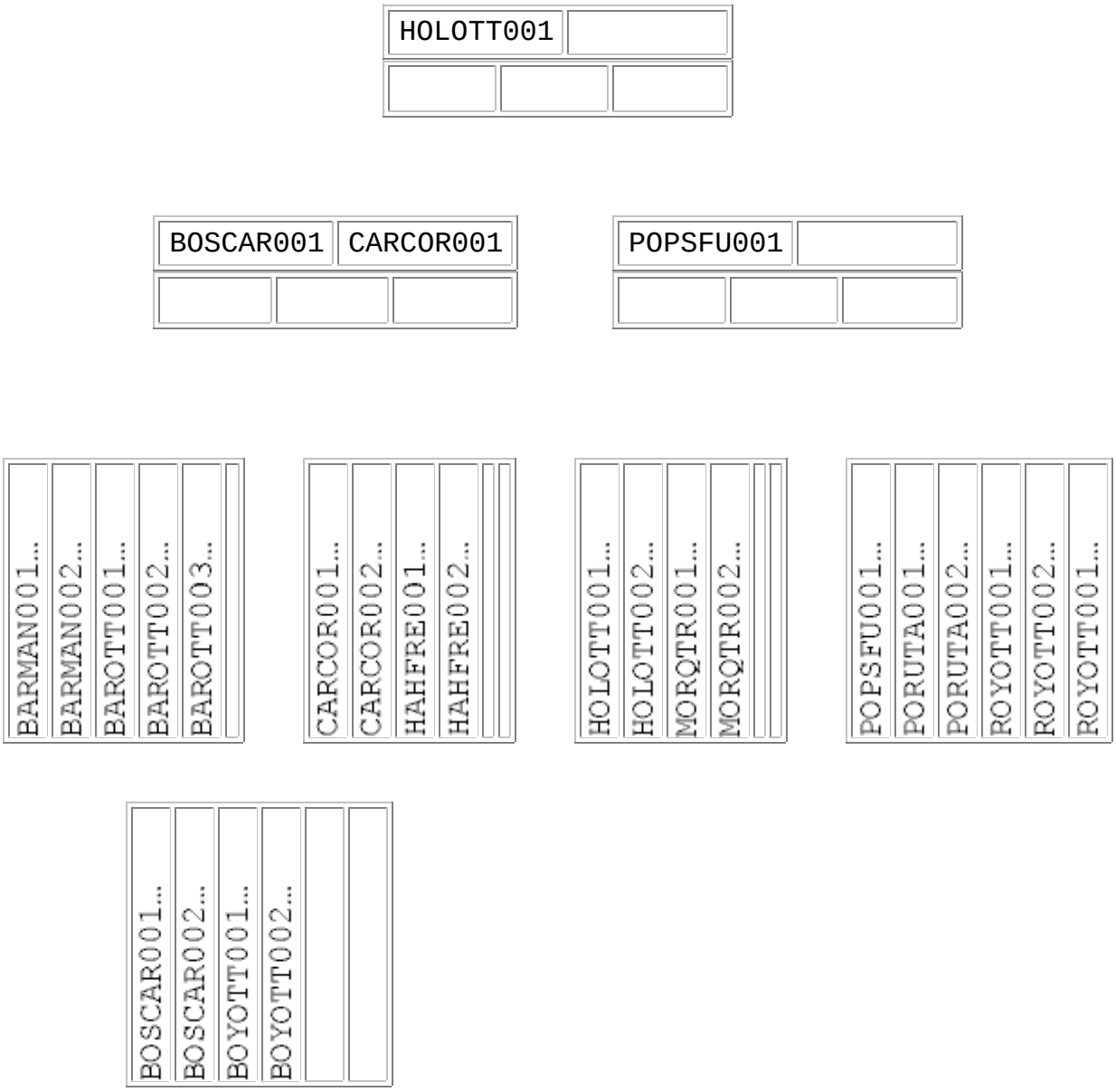
Can’t Find My Keys

Don’t go home yet. Let’s delete the record`POPSFU001` from the following B+ tree.



Q: Ok, fine. But what about the *index set* (the tree part)?

A:

Simple Prefix B+ Trees

The keys in the *index set* (the tree part) of the B+ trees were just copies of the keys in the *sequence set*. We don't actually need actual keys in the index set, since we always follow a path through the tree all the way to the records in the sequence set. The only reason we keep keys in the tree is to tell us which branch to take on our way down to the sequence set.

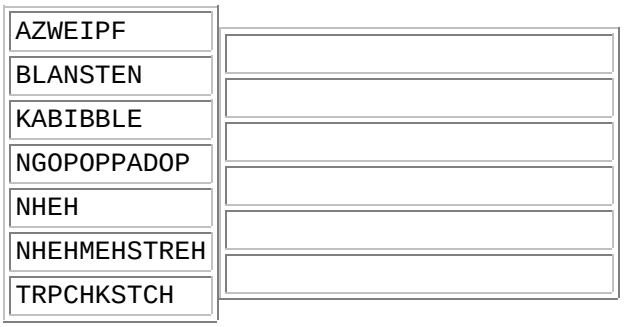
Simple Prefix B+ Tree

A B+ tree that contains *separators* in the index set instead of actual record keys.

Separator

Any value that is "greater than" some keys in the sequence set and/or "less than" some keys in the sequence set.

Q: How can we invent separators for string-valued keys?



Simple Prefixing our B+ Tree

Here is our B+ Tree again, this time with *simple prefix separators* in the index set instead of keys.