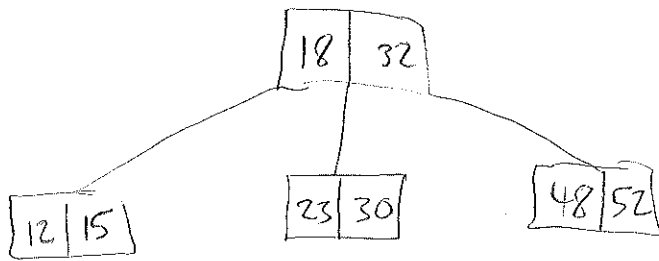


Trinary (Ternary) Search Tree



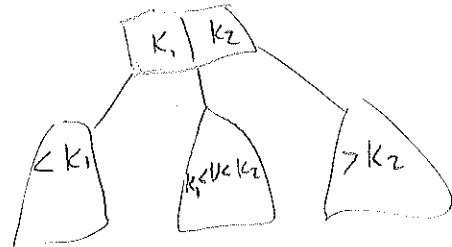
Q: how would you search this?
What if we didn't have 52?

+ possibility of empty slots

Worst-case structure still like BST

+ maintain balance, but not like AVL - use 2-3 flexibility.

Maintains a "TST property":



2-3 Tree

- "TST" property
- one or 2 keys per node
- 2 or 3 children, or 0 per leaf (no single children!)
- All leaves at the same level.

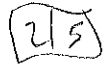
(Draw example tree)

Insertion Example

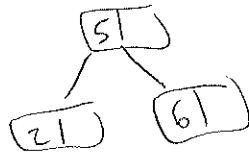
2



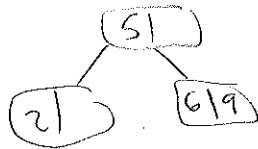
5



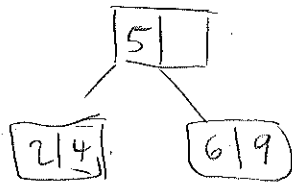
6



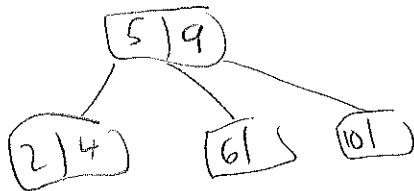
9



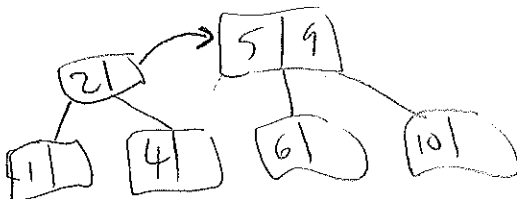
4



10



1



→

