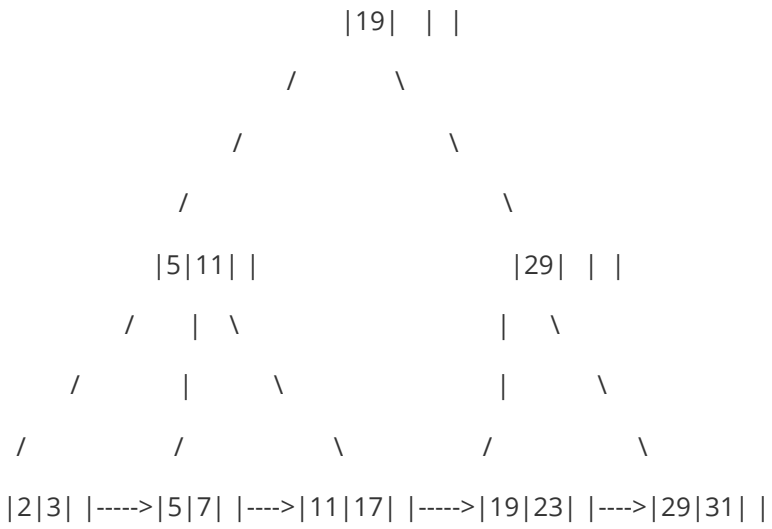


HW10

14.3

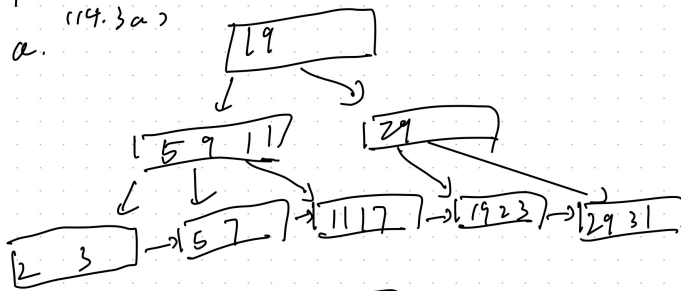
A



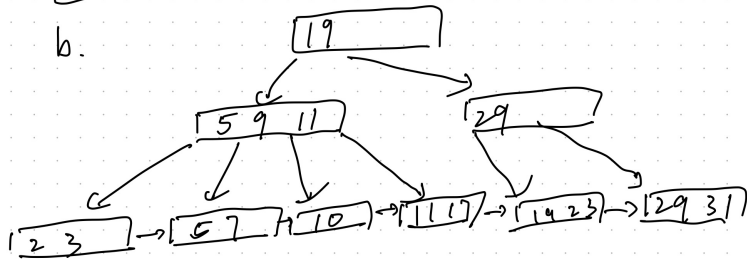
14.4

14.4

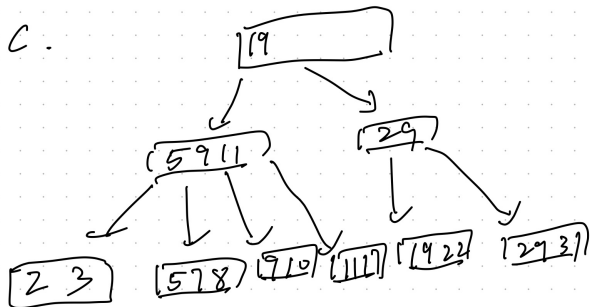
a. (14.3a)



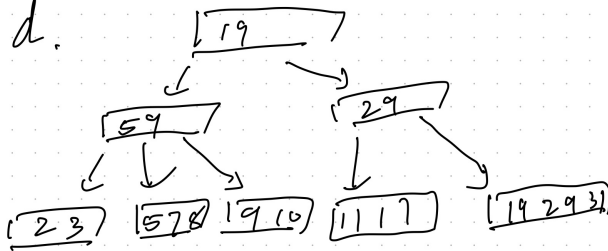
b.



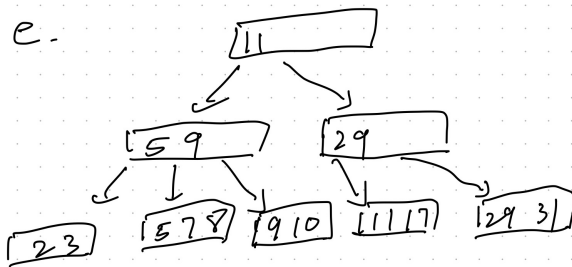
c.



d.



e.



14.11

If there have been no updates in a while, but there are a lot of index look ups on an index, then entries at one level can be merged into the next level.

The advantage is the read operator will reducing the cost.

24.10

There are multiple data structures in the LSM tree, one is in memory and the other is in disk. It is mainly used to provide low-cost indexes for those records with high probability of insertion and deletion. Give up disk read performance in exchange for write sequentiality