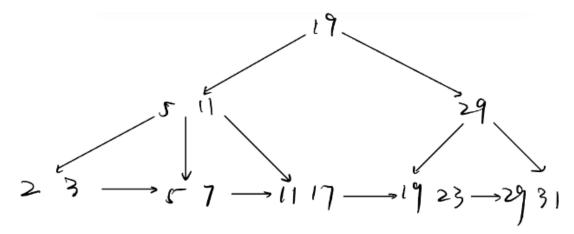
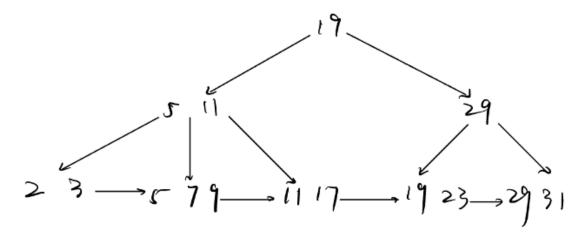
## Homework #10

14.3[a]

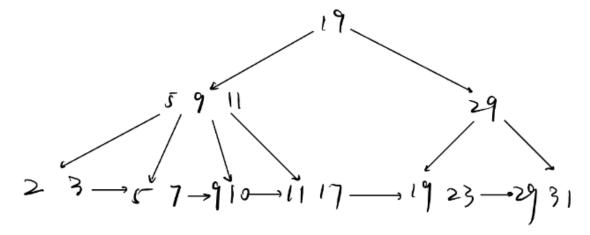


14.4

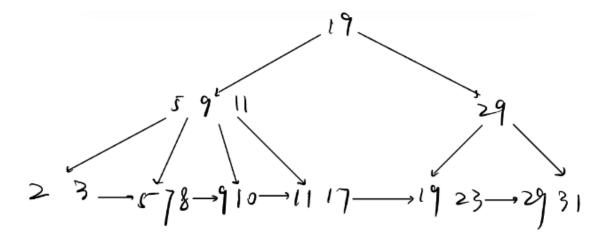
insert 9:



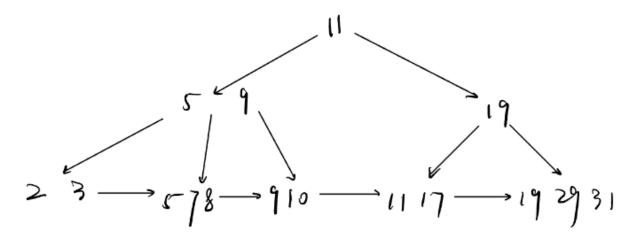
insert 10:



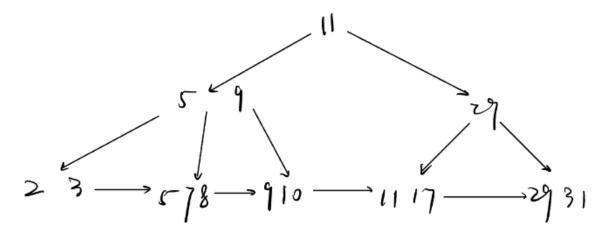
insert 8:



delete 23:



delete 19:



14.11

如果某时间段内读写频率较高,并且没有更新,可以将某一级别在没有写满的时候就合并到下一级别, 从而降低读取成本

## 24.10

原结构中需要多次 Merge 操作,可以将磁盘上每层的 k 棵树,当 k 个索引在同一层就合并成一个 k+1 层的树再写回,可以减少 Merge 操作次数,提高性能。但是 Read 操作需要查询更多的树