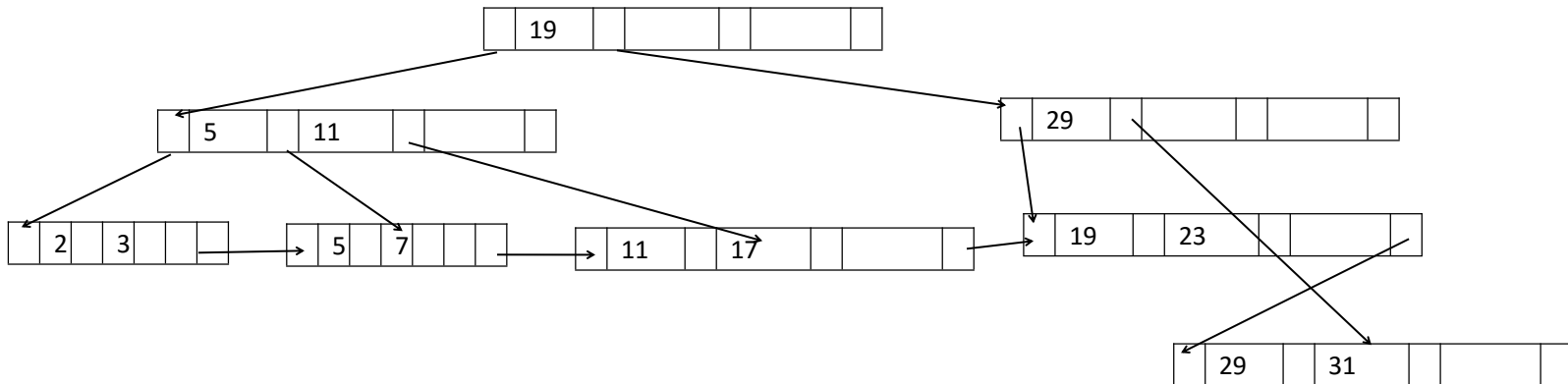


11.1

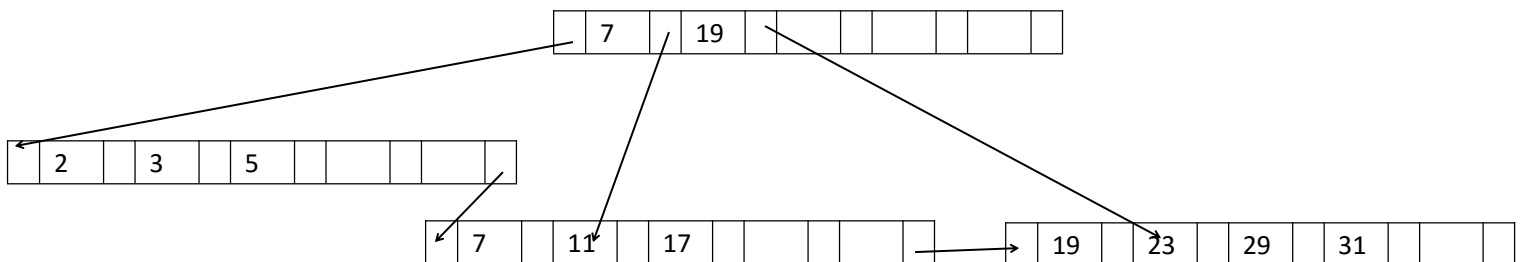
- 1 need more storage to store the extra indices
- 2 when do deletions or insertions, every index costs more time
- 3 when do updates, the content of index might have to change
- 4 the improvement of the query time is so little that we need not keep indices on other attributes.

11.3

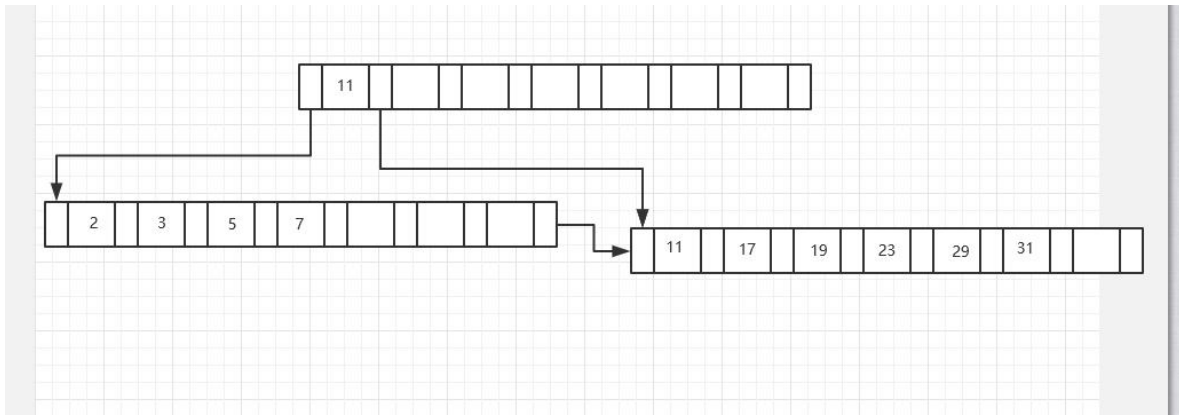
a



b



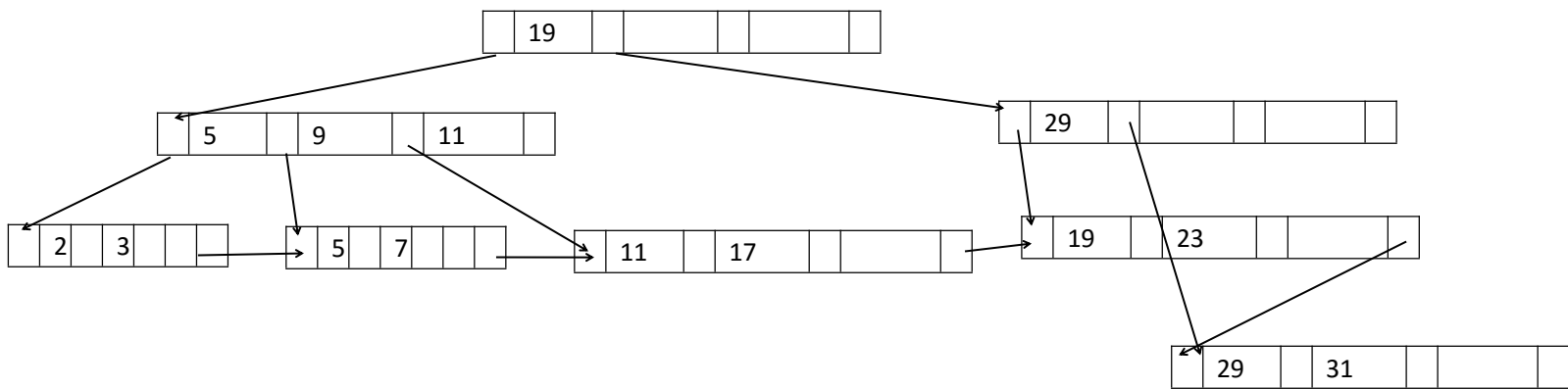
c



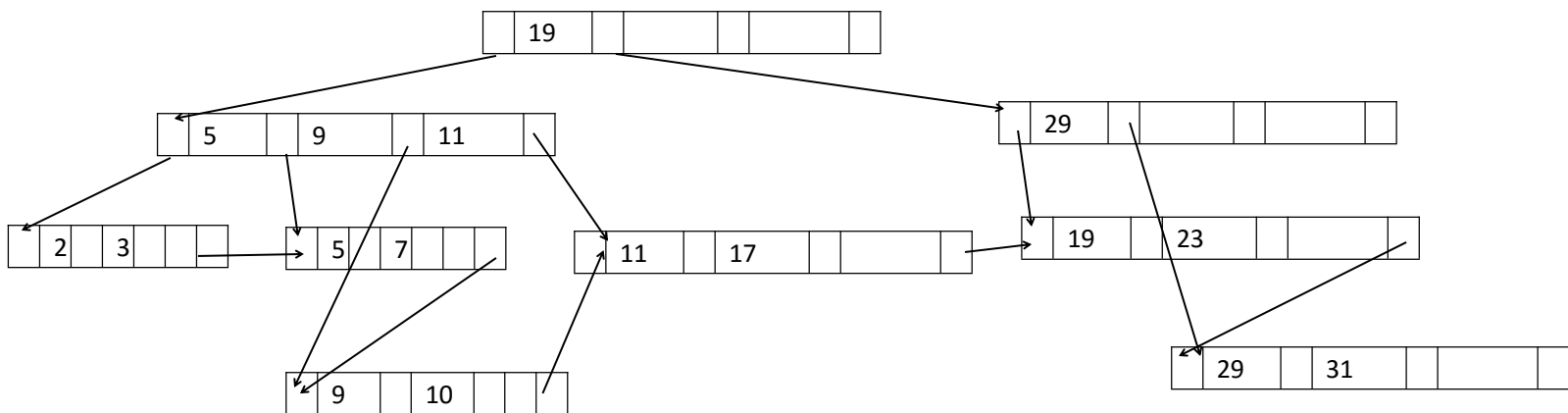
11.4

for a:

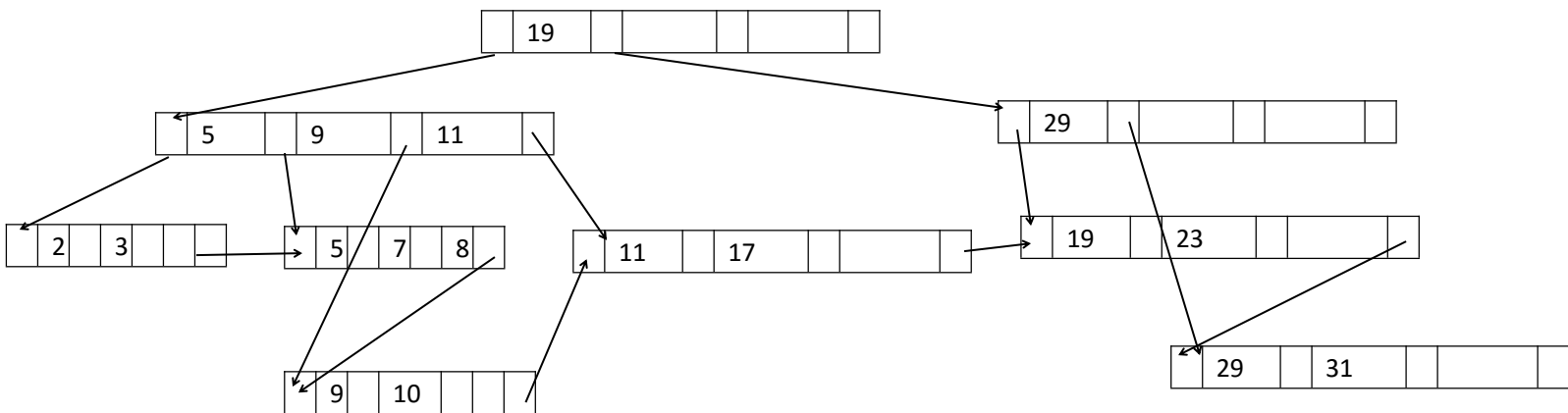
insert 9:



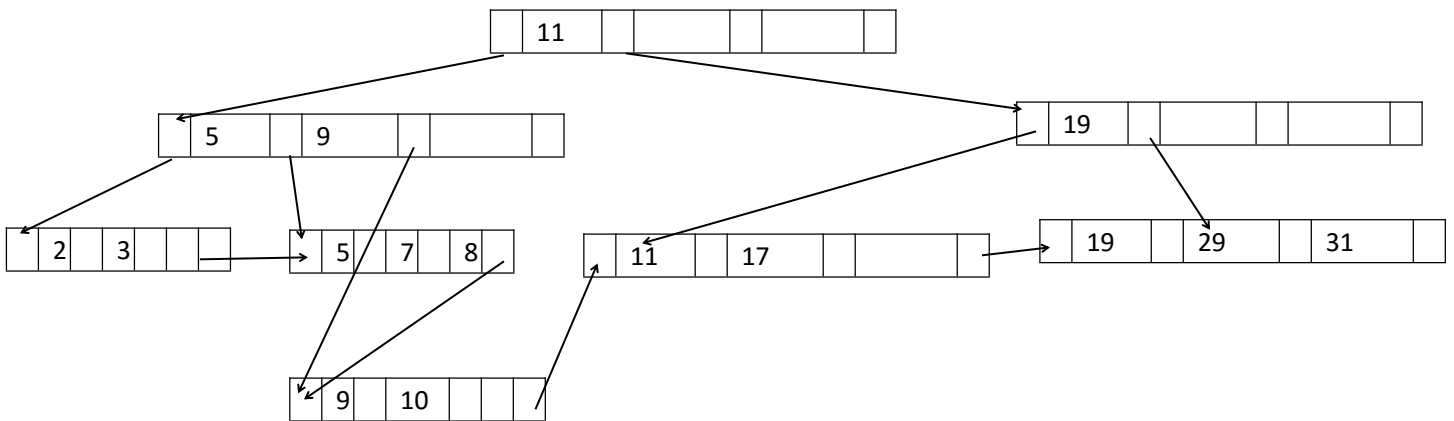
insert 10:



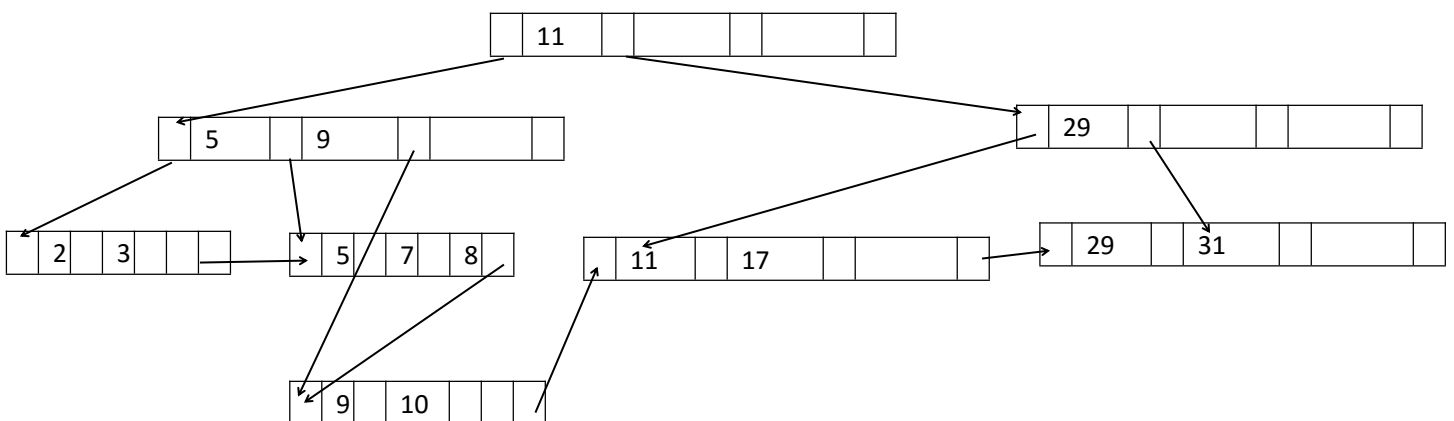
insert 8:



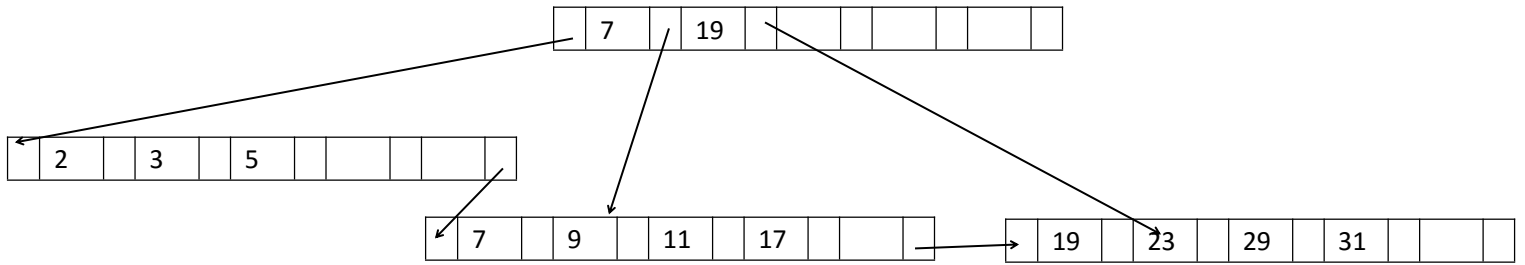
delete 23:



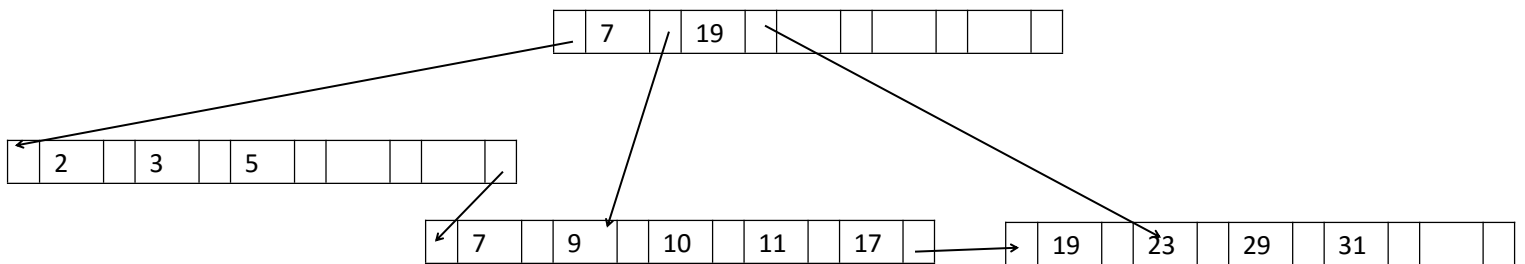
delete 19:



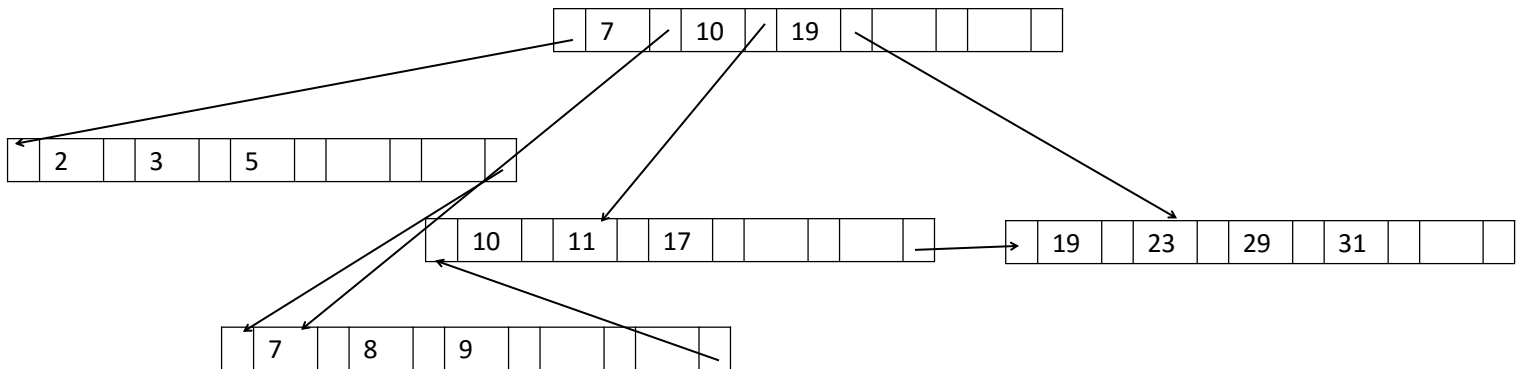
for b:
insert 9:



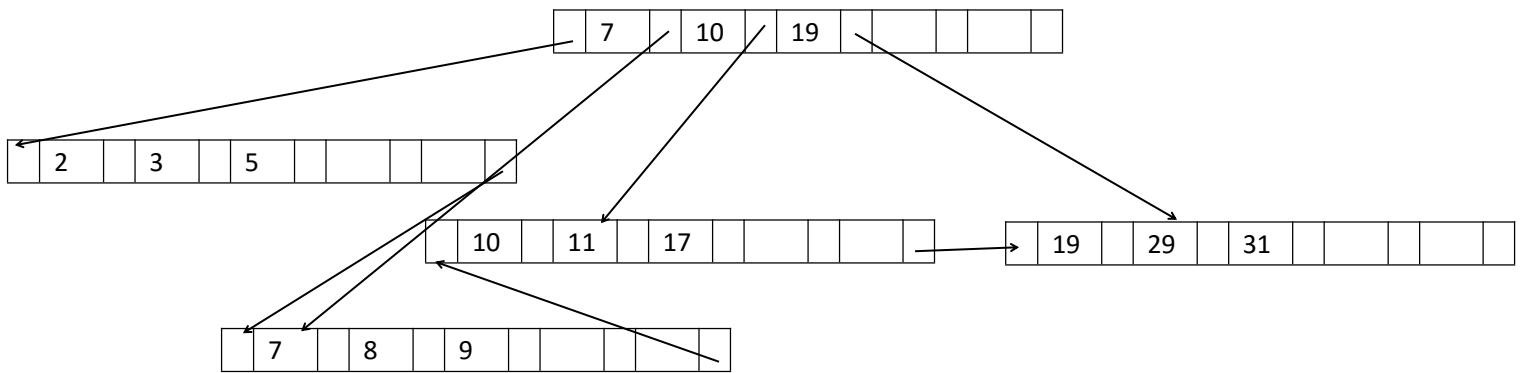
insert 10:



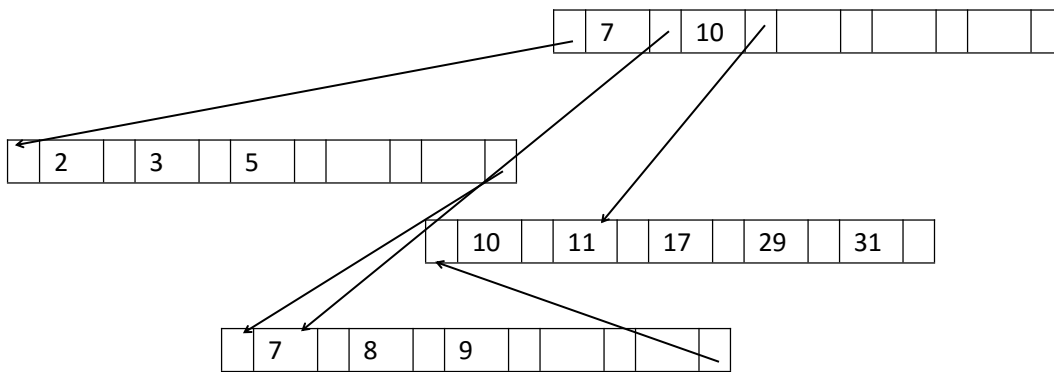
insert 8:



delete 23:

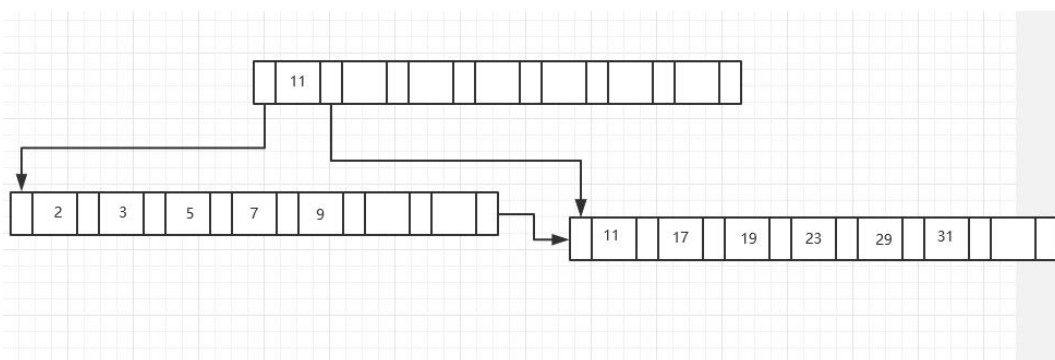


delete 19:

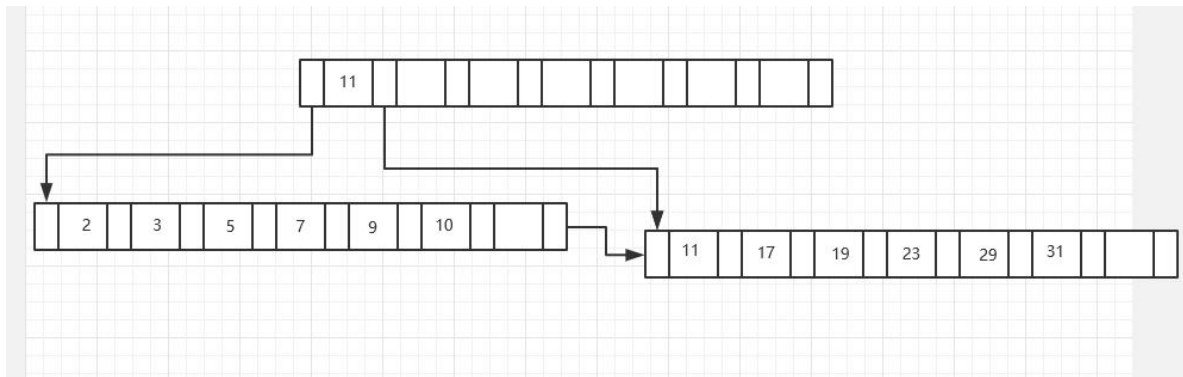


for c:

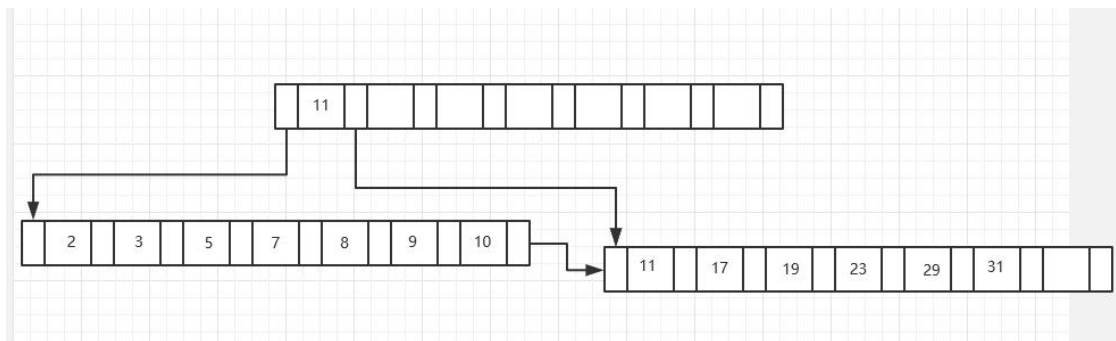
insert 9:



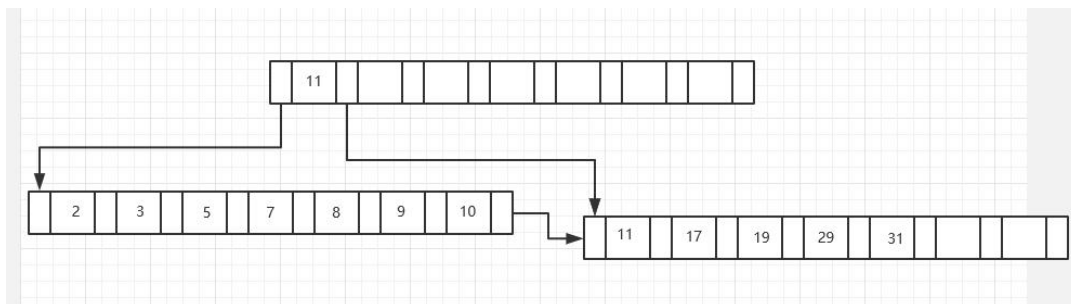
insert 10:



insert 8:



delete 23:



delete 19:

