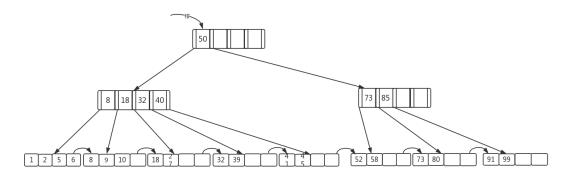
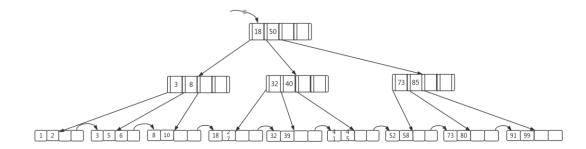
## 10.1 解:

(1)

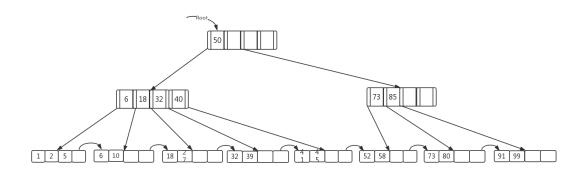


(2)

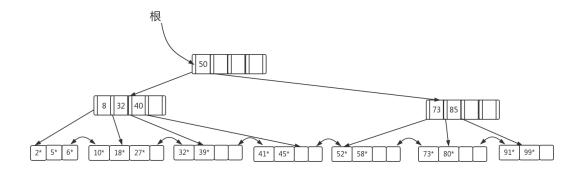


## 插入需要 4 页的读操作和 5 页的写操作;

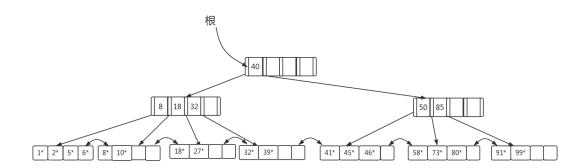
(3)



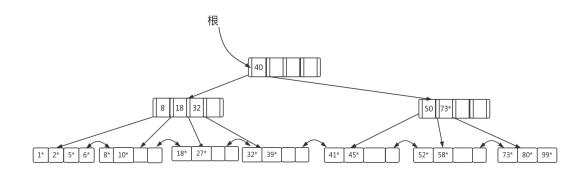
(4)



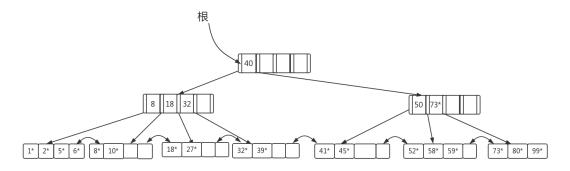
(5)



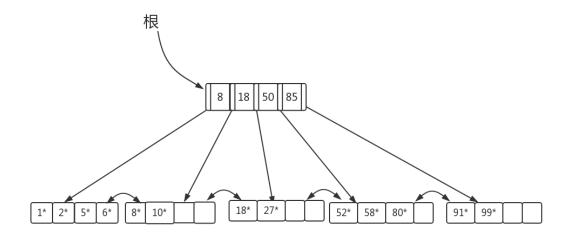
(6)



(7)

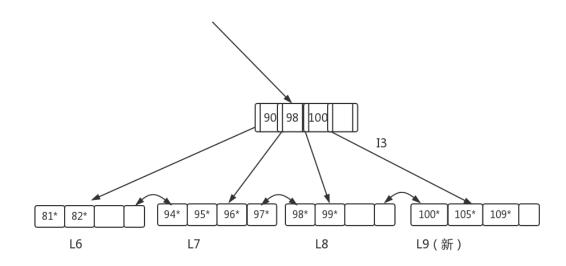


(8)

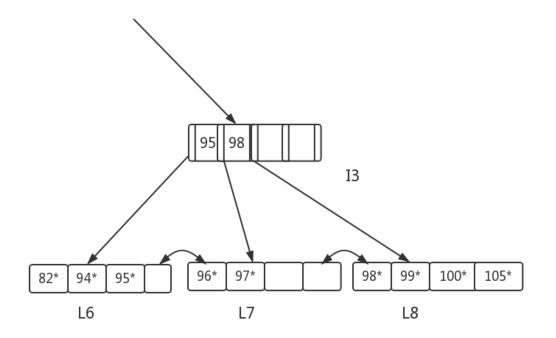


## 10.2 解:

- (1) I1、I2, L2-L8;
- (2)



(3)



- (4) 78;
- (5) A、B、C 三个子树的高度均为 1, 并且 A 子树的索引值的范围小于 10, B 子树的索引值的范围 [10, 20), C 子树的索引值的范围 [20, 30);
  - (6) ① 结果不变;
- ②在 L8 中添加 key 为 109 的溢出页;
- ③删除记录并保持空的页;
- ④ISAM 结构是完全静态的,不能项增加它的高度;
- ⑤结果不变;
  - (7) 创建由三个溢出页组成的链最少需要九次插入操作。