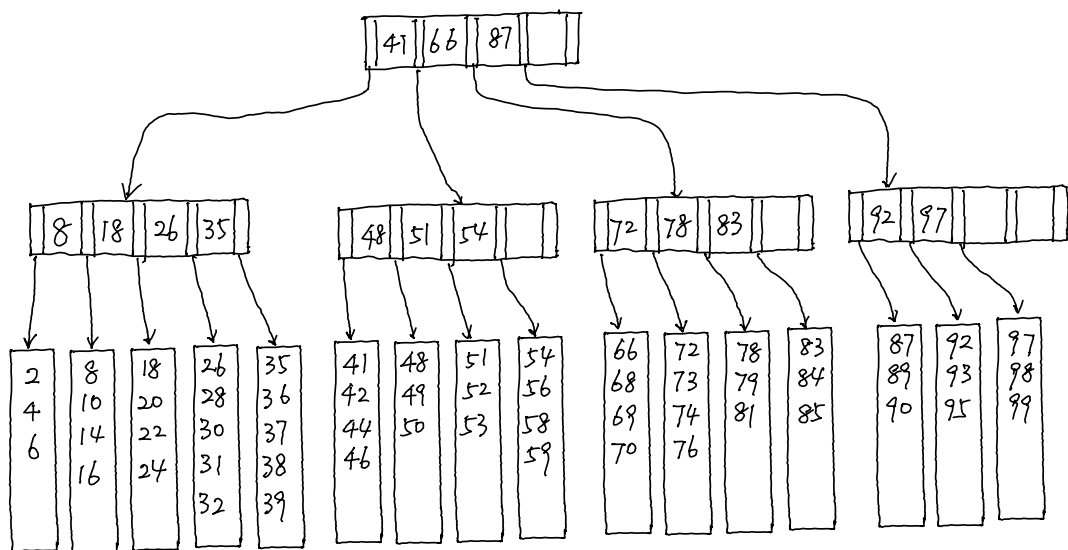
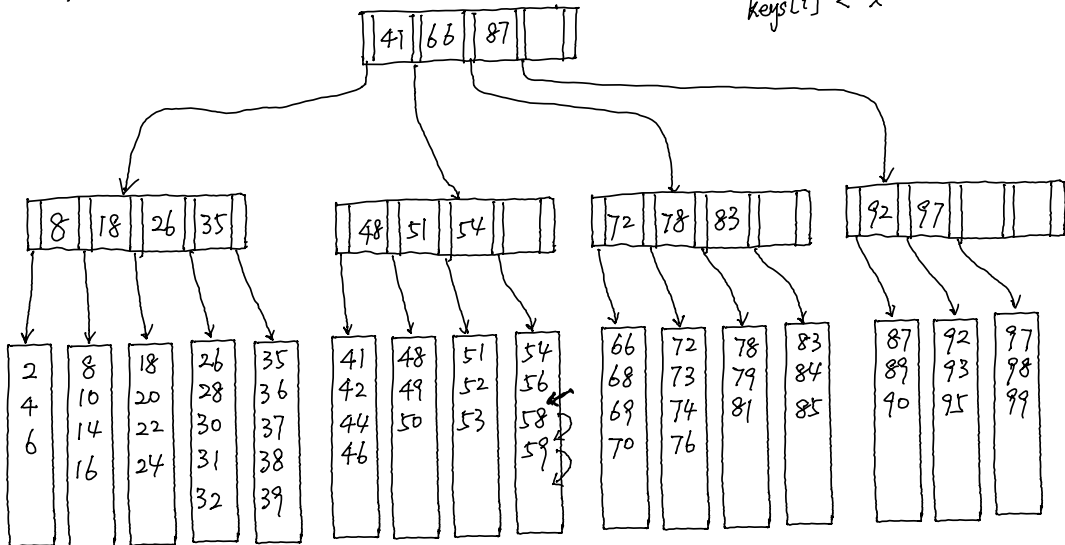


BTree 的操作图示

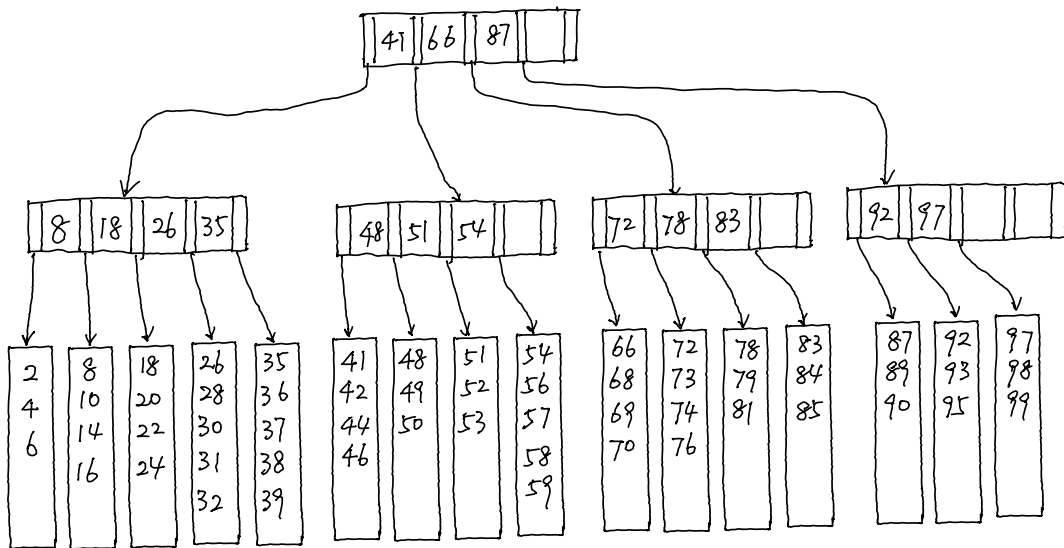


insert 57
调用 insert(x), x=57.

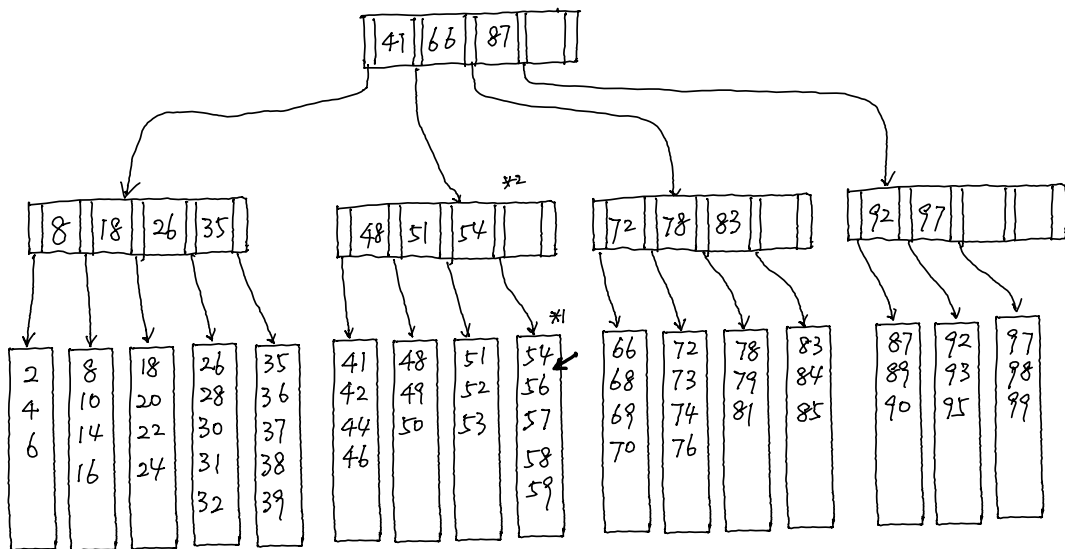
root 比较
 $keys[i] < x$



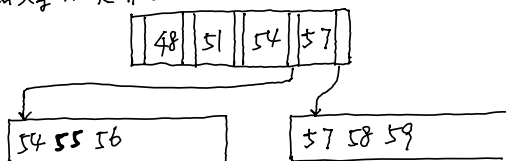
54 56 58 59 → 54 56 58 59 → 54 56 57 58 59

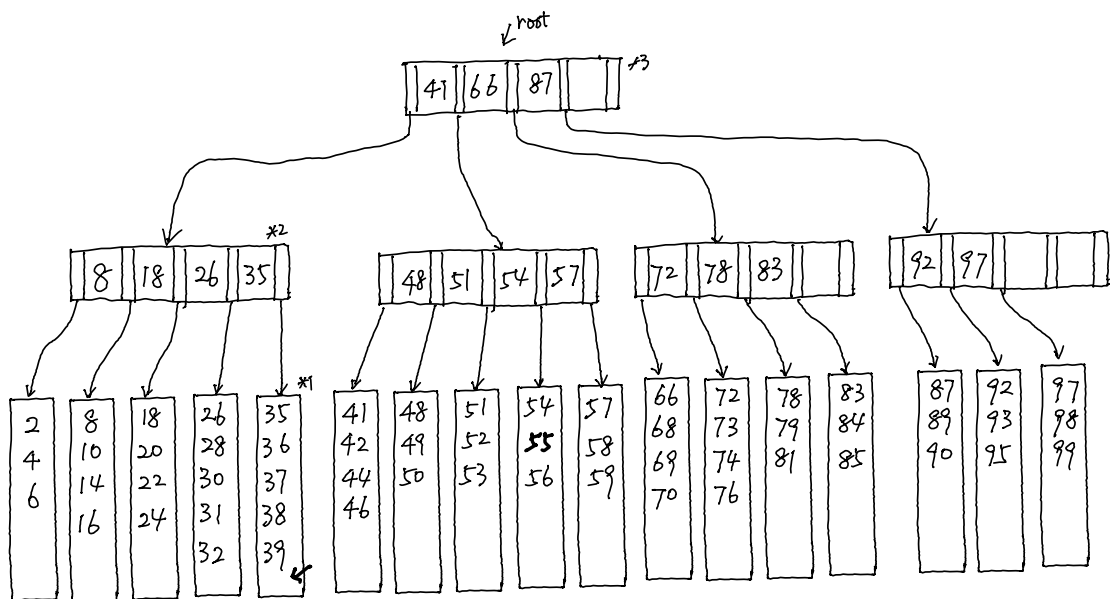


insert (55)



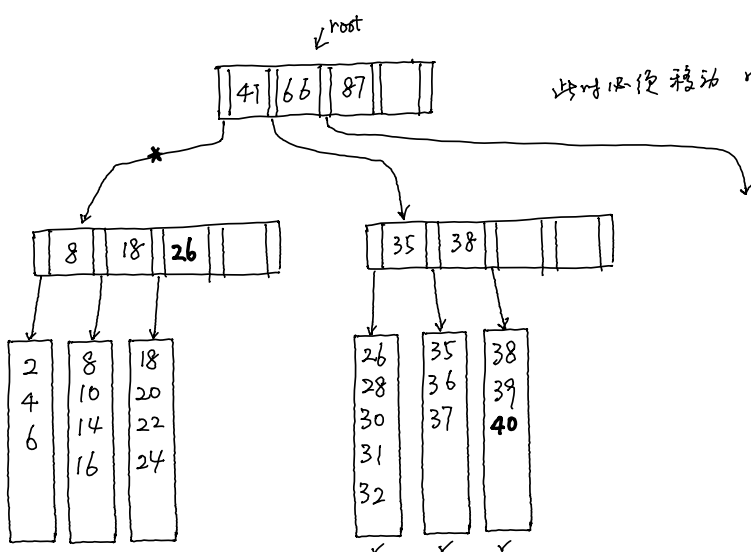
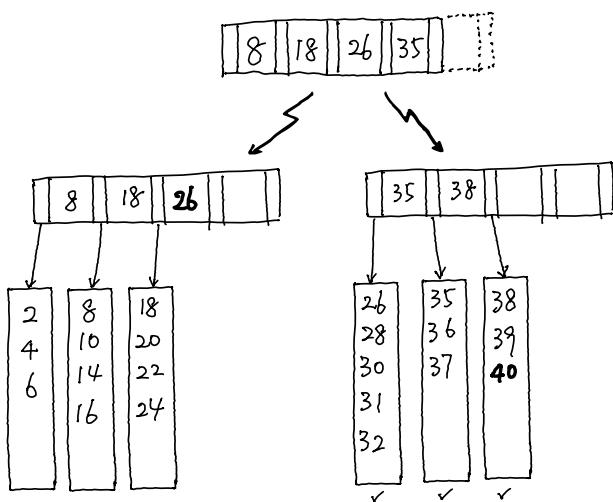
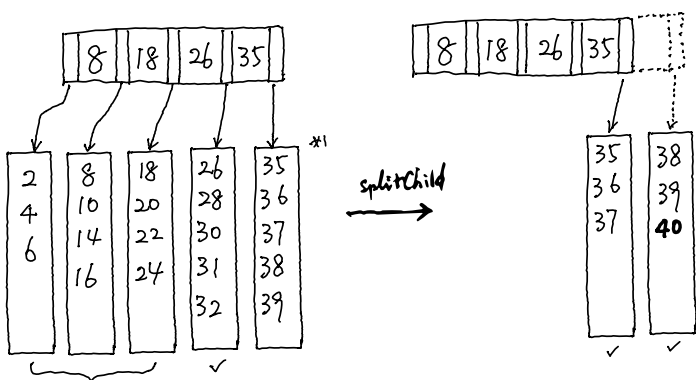
此时x1是满结点，而它的父节点x2是非满结点，故可将x1分成两片树叶。



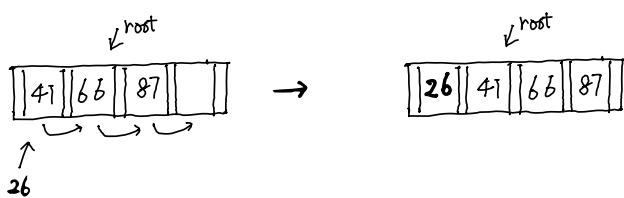


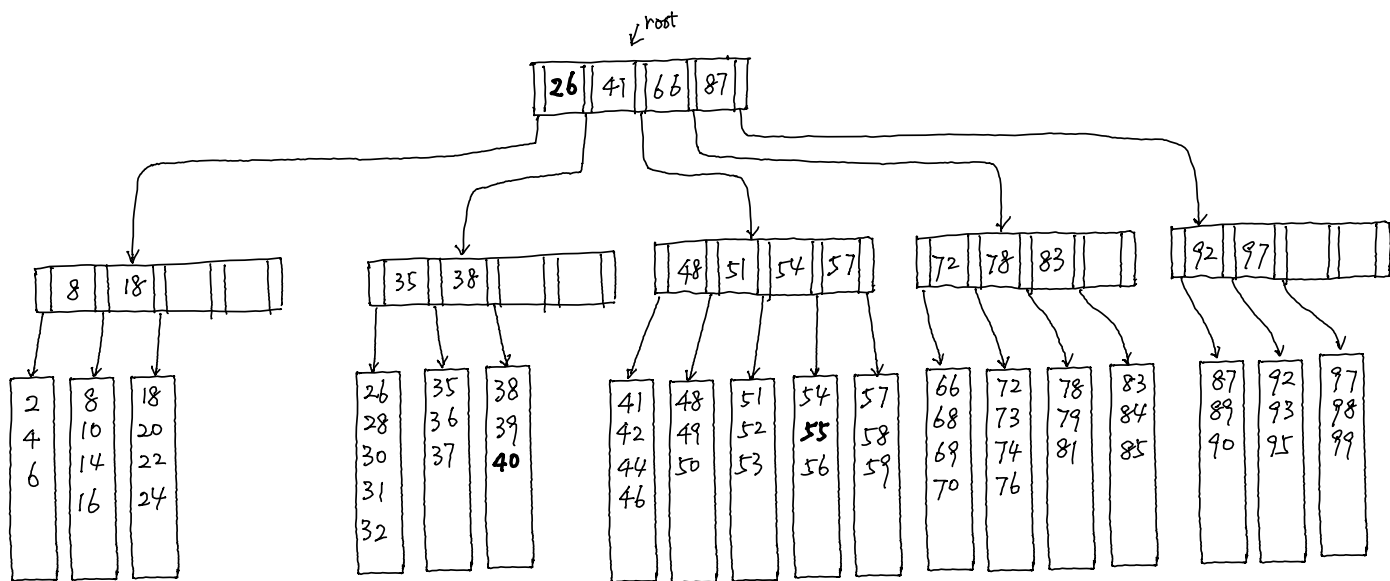
接下来插入 40。*1 已满，其父结点 *2 也满了，而 *2 的父结点 *3 未满。

故可以依次分裂 *1, *2, *3 结点。

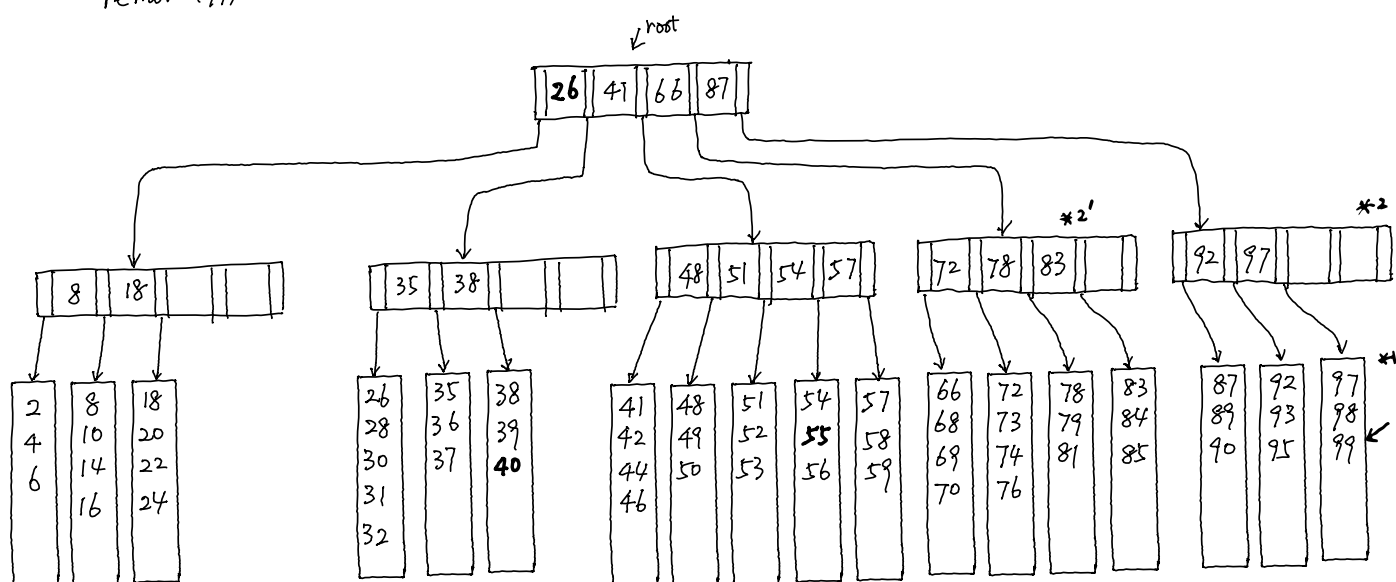


此时必须移动 root 结点中 Keys 数组中
元素，



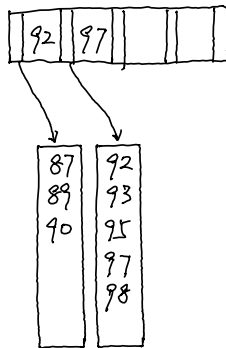
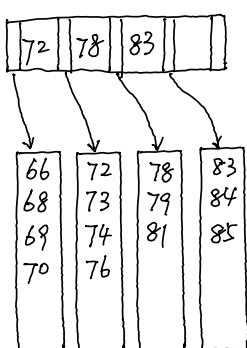
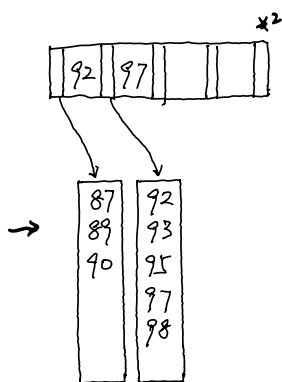
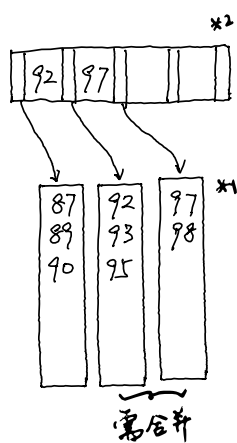


删除 99
remove (99)



但此时 *2 只有两个儿子。

方法: 从左边 *2' 领养一个儿子。



领养

