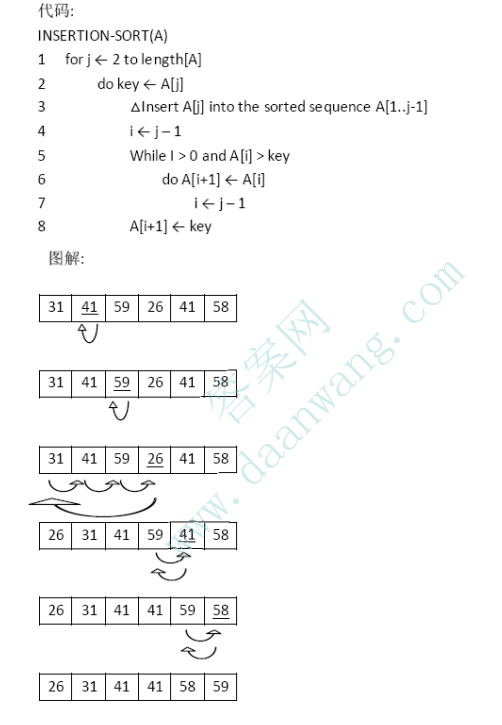
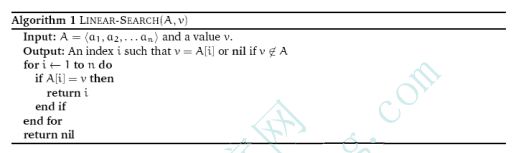
第一次

**2.1-1**



**2.1-3**



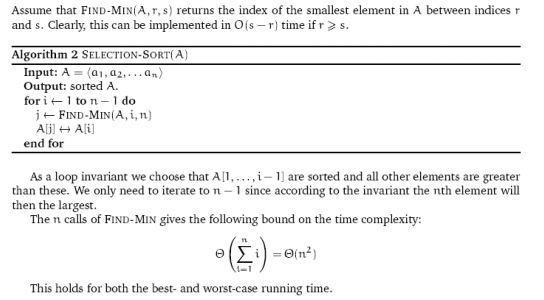
循环不变式：A[1:k]中不存在v，且A[k+1]=v或A的长度为k时结束。

初始化：循环的第一次迭代之前，循环不变式为真

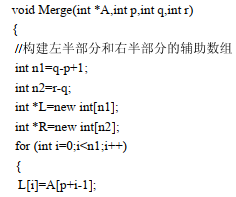
保持：在迭代之前A[1:k]中不存在v，如果A[k+1]=v或len(A)=k则终止，否则下次迭代之前仍为真

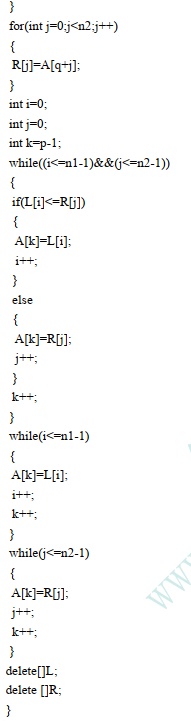
终止：如果终止，则A[k+1]=v或len(A)=k，返回值为k+1或NIL。

**2.2-2**

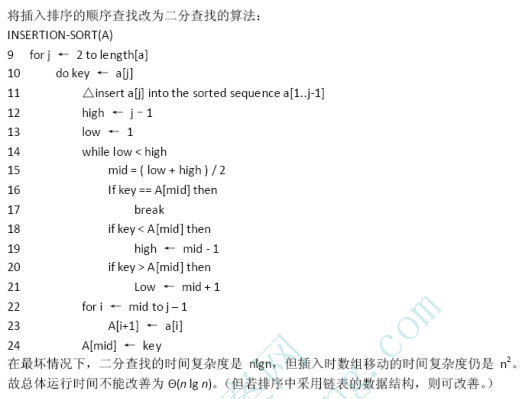


**2.3-2**



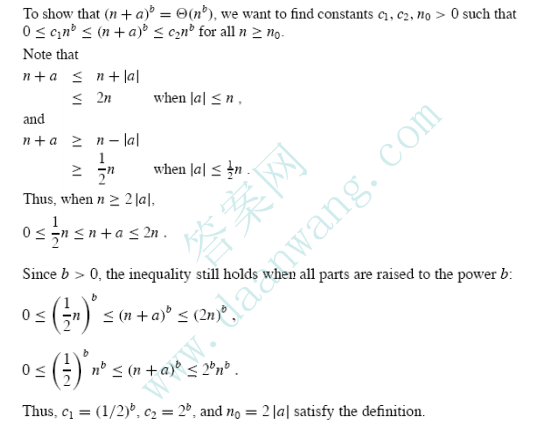


**2.3-6**

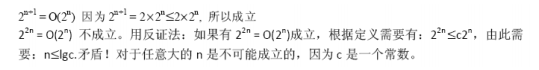


第二次

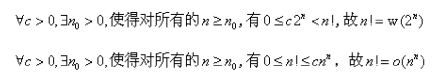
**3.1-2**



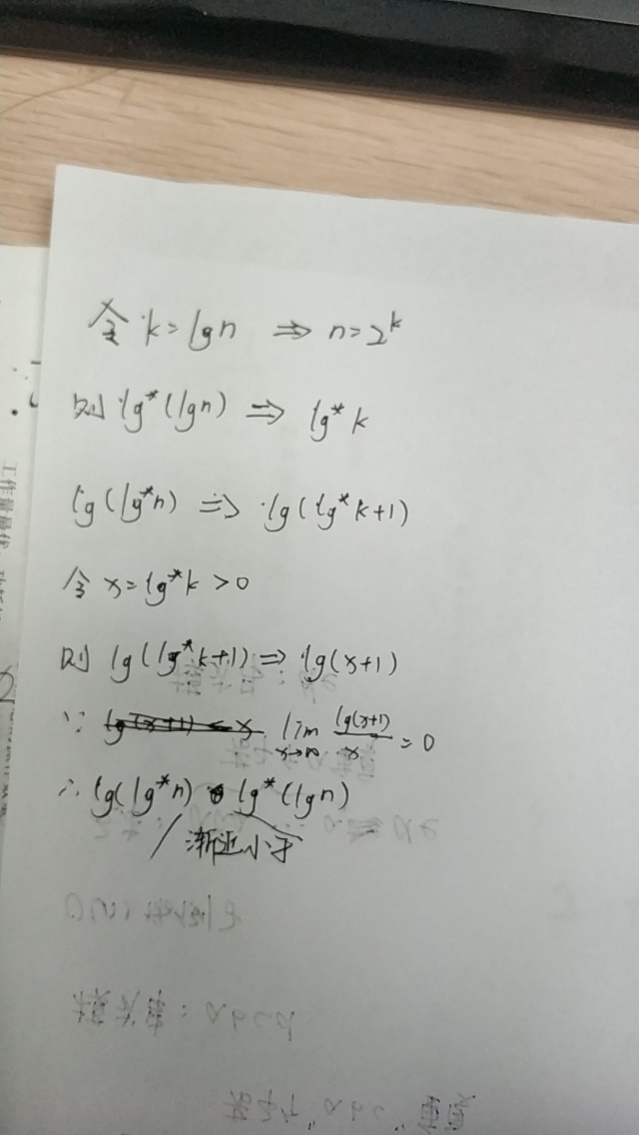
3.1-4



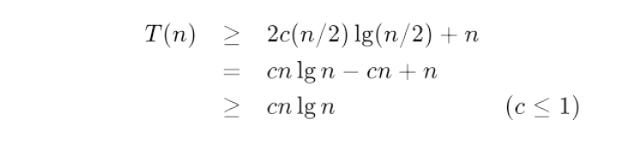
3.2-3



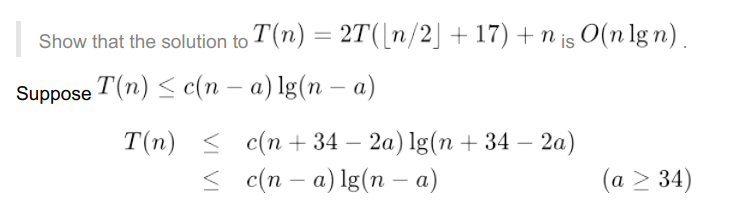
3.2-5



4.3-3

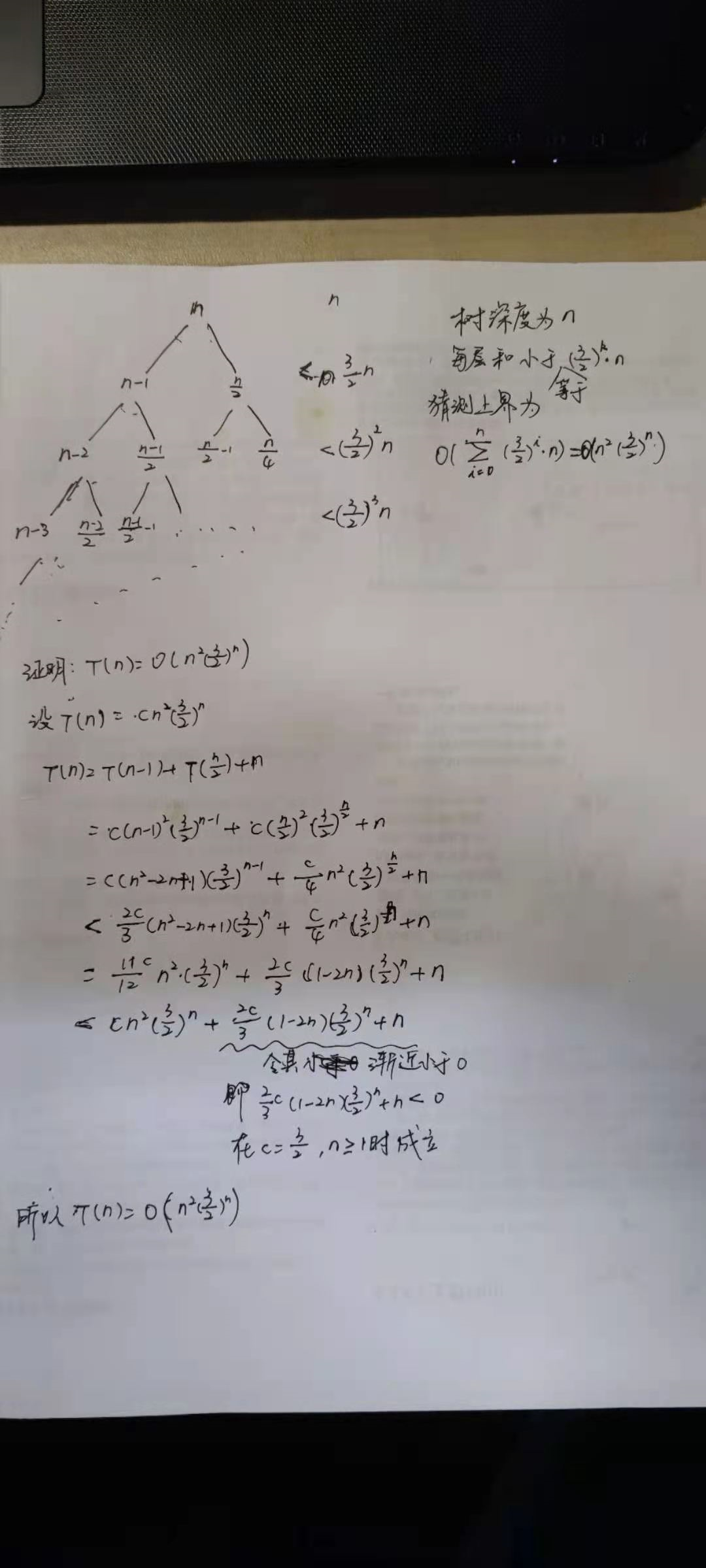


4.3-6



第三次

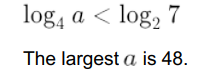
4.4-5



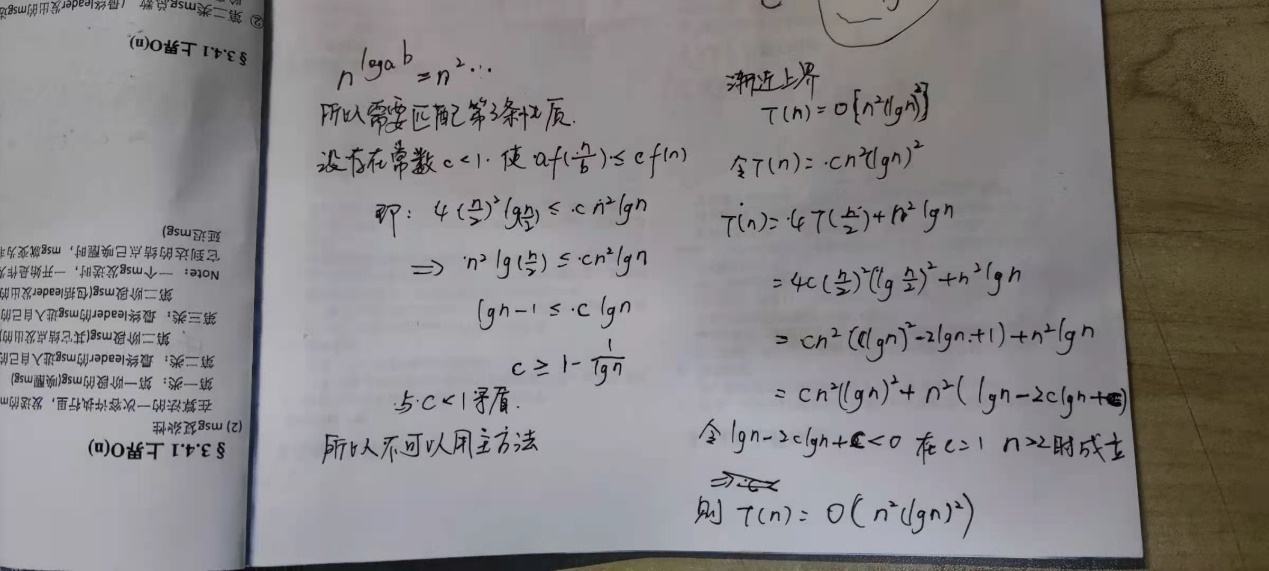
4.4-7

Θ(n²)

4.5-2



4.5-4

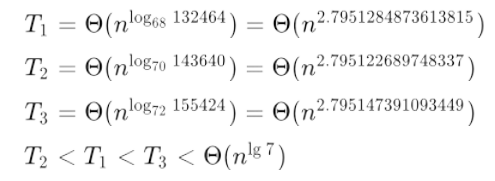


4.2-3

用0填空矩阵，使其规模为2的幂。

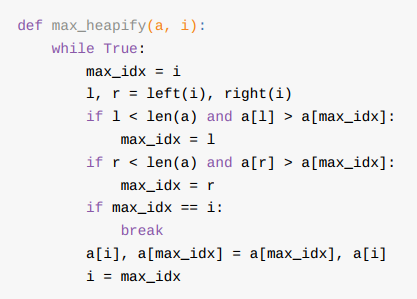
通过主方法可证明其运行时间。

4.2-5

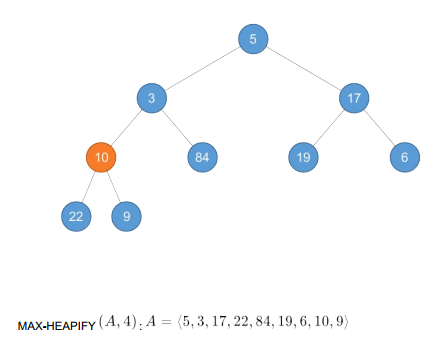


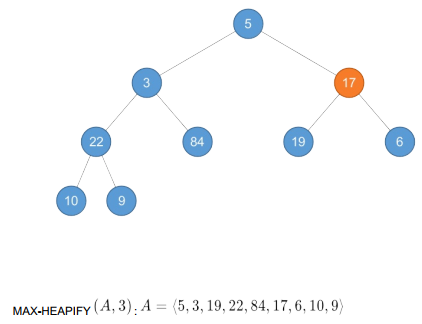
第四次

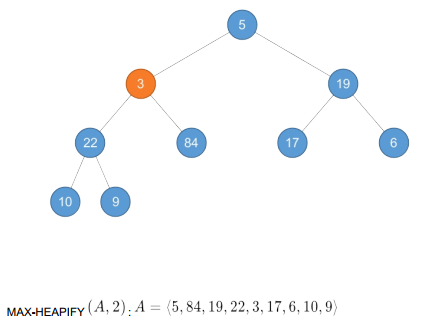
6.2-5

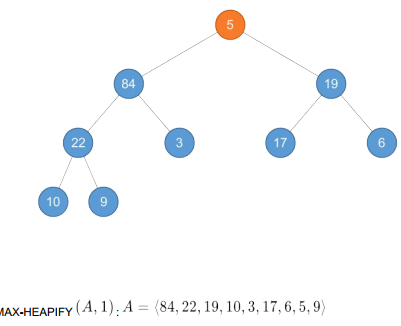


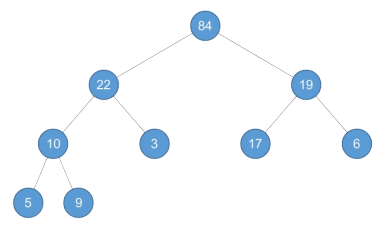
6.3-1



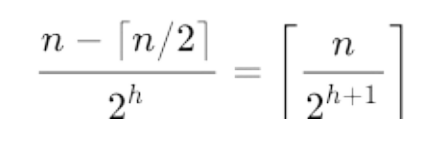








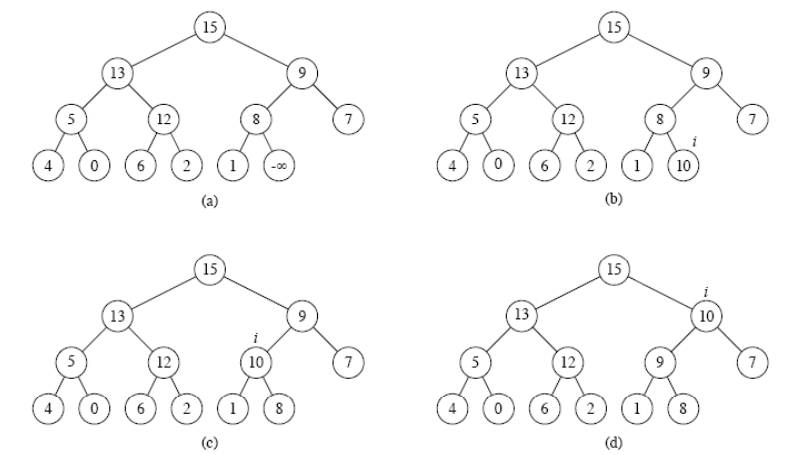
6.3-3



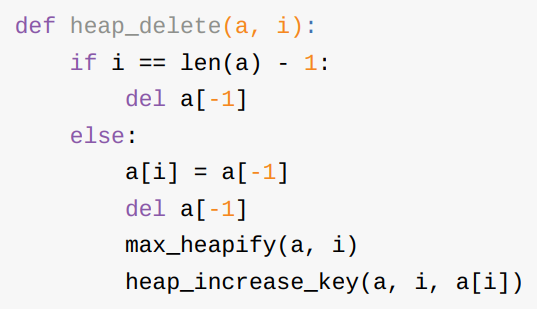
6.4-4

BUILD-MAX-HEAP()需要O(nlogn)，MAX-HEAPIFY()需要O(logn)，总时间复杂度为O(nlogn)

6.5-2

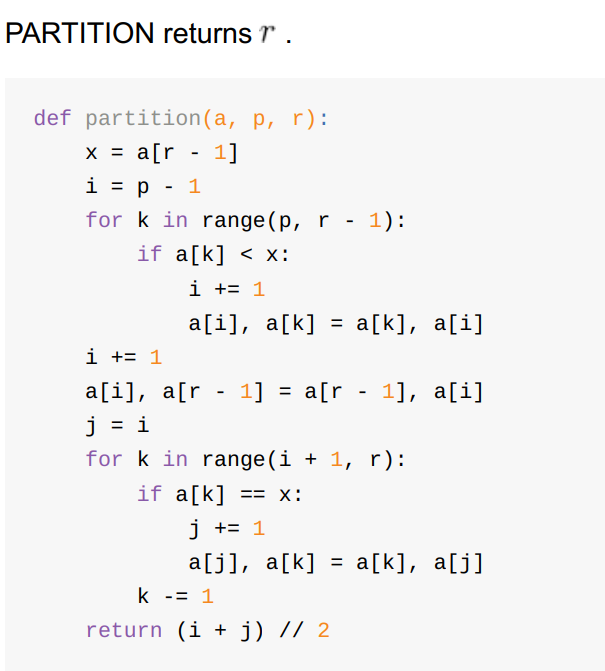


6.5-8

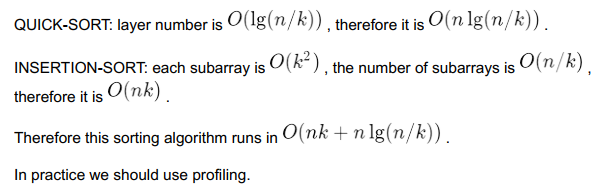


第五次

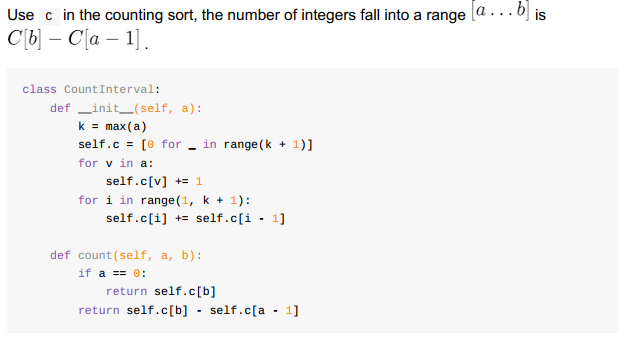
7.1-2



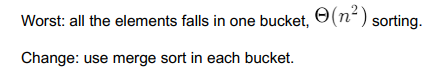
7.4-5



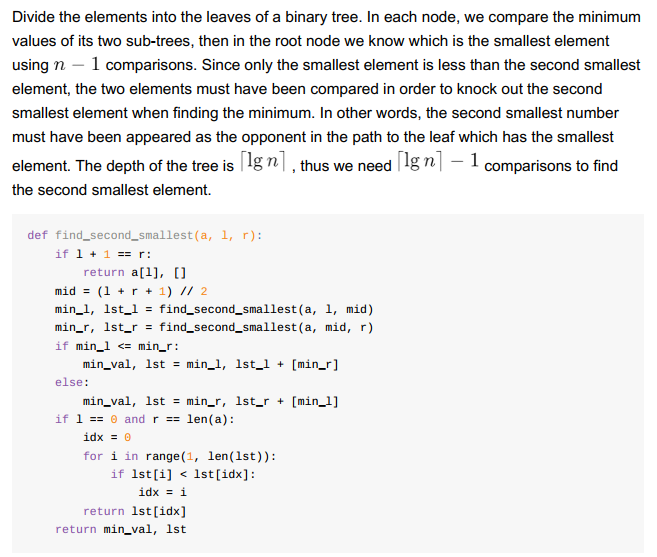
8.2-4



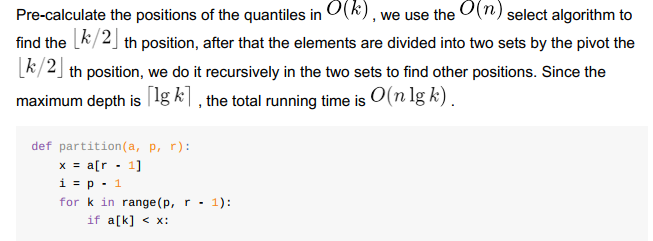
8.4-2

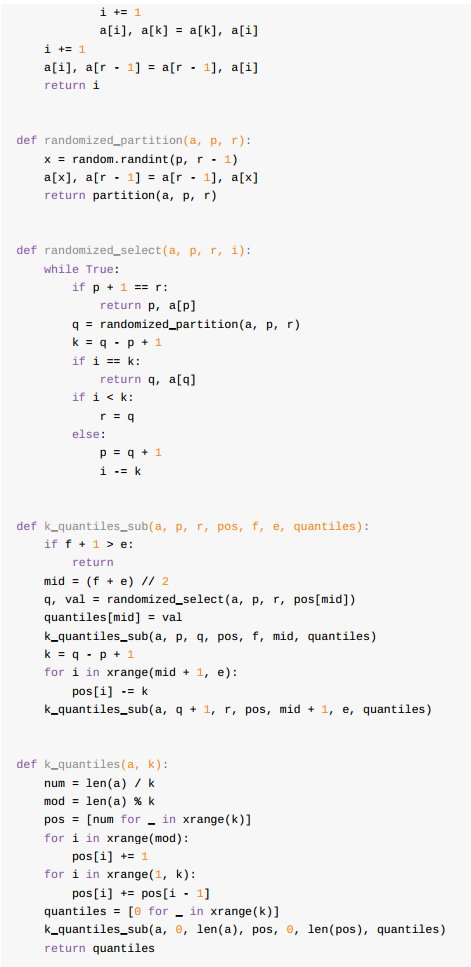


9.1-1



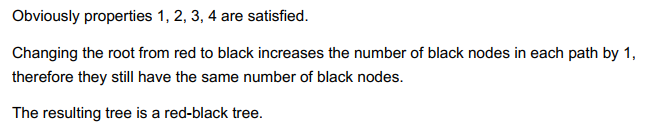
9.3-6



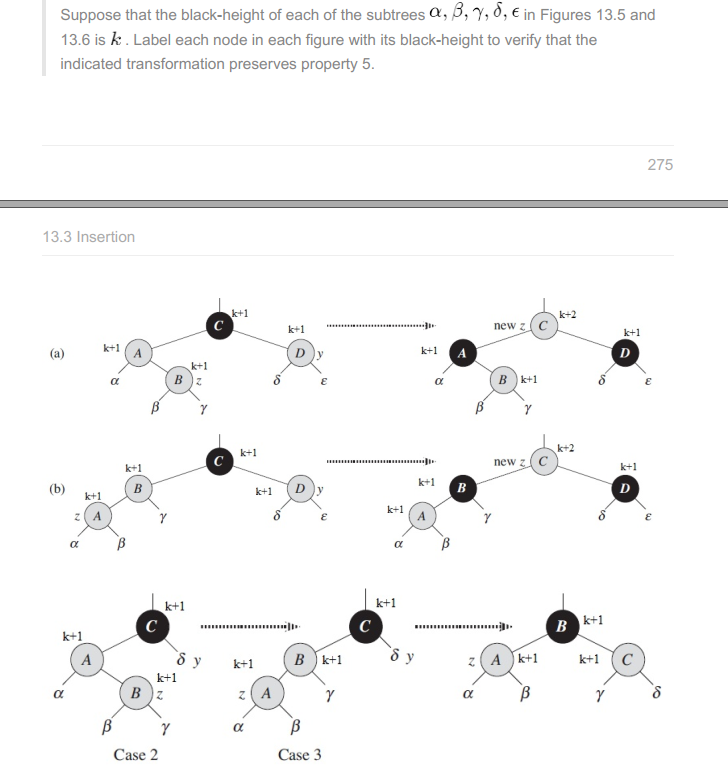


第六次

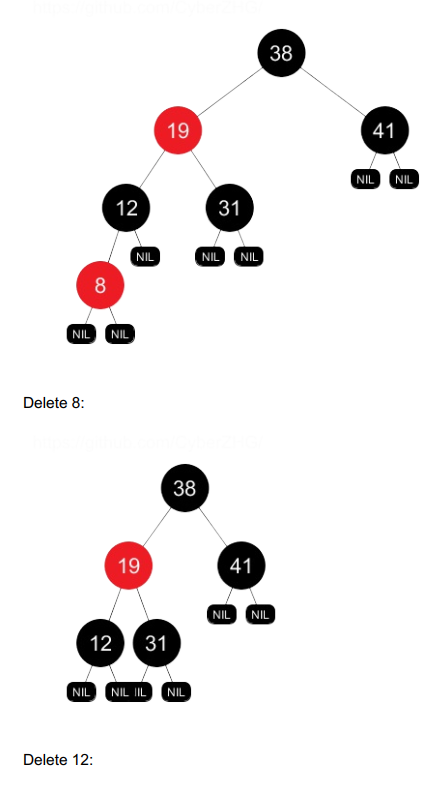
13.1-3

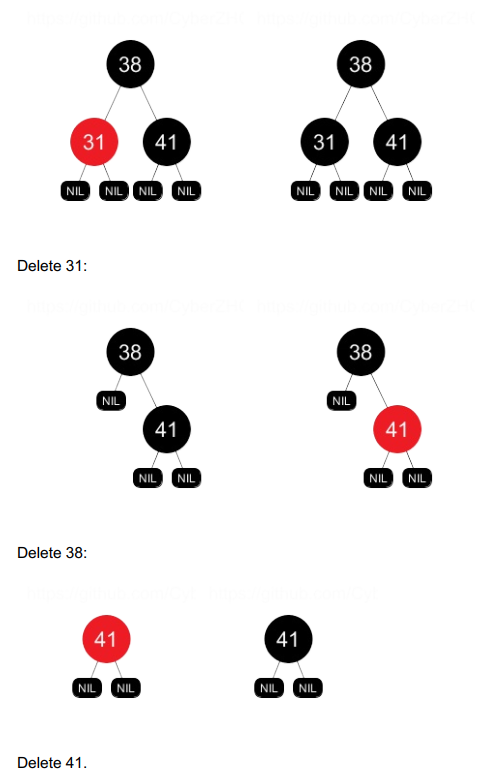
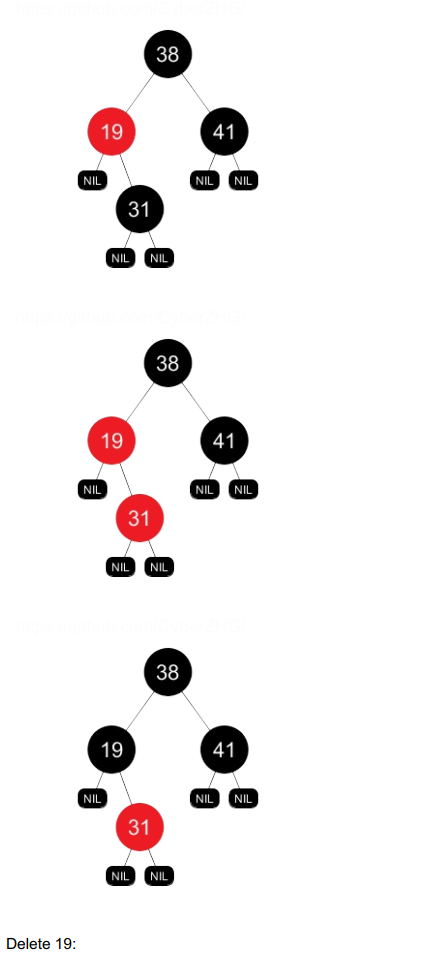


13.3-4



13.4-3





14.1-5



14.2-2



14.3-3

