题目原文：

Suppose that you have an n-story building (with floors 1 through n) and plenty of eggs. An egg breaks if it is dropped from floor T or higher and does not break otherwise. Your goal is to devise a strategy to determine the value of T given the following limitations on the number of eggs and tosses:

- Version 0: 1 egg, ≤T tosses.
- Version 1: ~1lgn eggs and ~1lgn tosses.
- Version 2: ~lgT eggs and ~2lgT tosses.
- Version 3: 2 eggs and ~2$\sqrt{n}$n tosses.
- Version 4: 2 eggs and ≤c$\sqrt{T}$T tosses for some fixed constant c

分析：

version0： 拿着一个鸡蛋从1~n依次扔就可以，到floor T会碎，故复杂度为≤T

version 1: 采用二分查找，首先从n/2层开始扔:

if(鸡蛋碎) 从(n/2)/2层开始扔；

else 从n/2+(n/2)/2层开始扔

二分方法需要lgn个鸡蛋尝试lgn次

version 2: 依次从1, 2, 4, 8, 16, 32,...2^k开始扔，如果鸡蛋在2^k碎了，那么2^{k-1}≤T≤2^k，这时已经使用了 lgT 次步，接下来在[2^{k-1}+1,2^k）区间进行version1的二分查找方法，需要花费lgT步。这两种操作加起来总共花费2lgT步

version 3: 将0~n层楼分成[1, $\sqrt{n}$n-1], [$\sqrt{n}$n, 2 $\sqrt{n}$n-1], [2$\sqrt{n}$n,3 $\sqrt{n}$n-1]...[k$\sqrt{n}$n, (k+1)$\sqrt{n}$n-1]..个区间，用一个鸡蛋分布从1开始在各个区间的起始楼层扔，如果在k$\sqrt{n}$n层碎了，那就从(k-1)$\sqrt{n}$n+1开始逐层扔。第一步区间选择用了 $\sqrt{n}$n的复杂度，第二步区间内部扔鸡蛋用了 $\sqrt{n}$n的复杂度，总共用了 2$\sqrt{n}$n

version 4: 尝试从1, 4, 9, 16, 25,...$(k-1)^2$, k^2....楼层扔鸡蛋，加入鸡蛋在楼层k^2碎了，意味着$(k-1)^2$≤T≤k^2，这一步尝试了$\sqrt{T}$T次(k=$\sqrt{T}$T)。接着从楼层$(k-1)^2$+1开始逐层扔，最多尝试至k^2-1结束，这一步需要尝试k^2-1-$(k-1)^2$-1=2$\sqrt{T}$T-1=2$\sqrt{T}$T-2次。总共用了3$\sqrt{T}$T-2次