

绪论

复杂度分析：封底估算

He calculated just as men breathe, as eagles
sustain themselves in the air.

我仿佛是横越三世来见你的，而你却不在

A large, stylized orange graphic consisting of two parts. On the left is a large number '01' where the '0' is a circle and the '1' has a diagonal stroke. To its right is a minus sign '-' followed by a large number 'D3' where the 'D' is a vertical rectangle and the '3' has a diagonal stroke.

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Back-Of-The-Envelope Calculation

❖ 地球（赤道）周长 $\approx 787 \times 360/7.2$

$$= 787 \times 50 = 39,350 \text{ km}$$

❖ 1天 $= 24\text{hr} \times 60\text{min} \times 60\text{sec}$

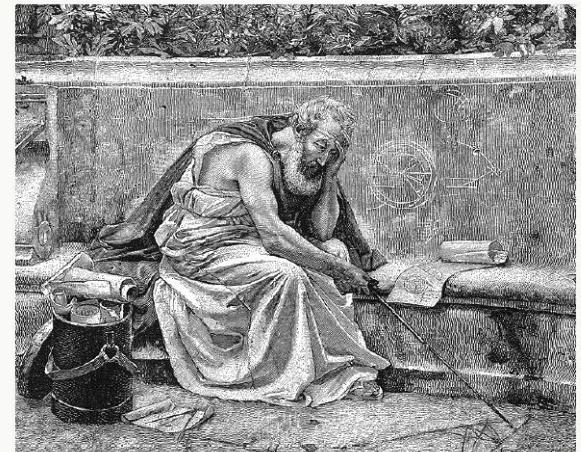
$$\approx 25 \times 4000 = 10^5 \text{ sec}$$

❖ 1生 $\approx 1\text{世纪} = 100\text{yr} \times 365 = 3 \times 10^4 \text{ day} = 3 \times 10^9 \text{ sec}$

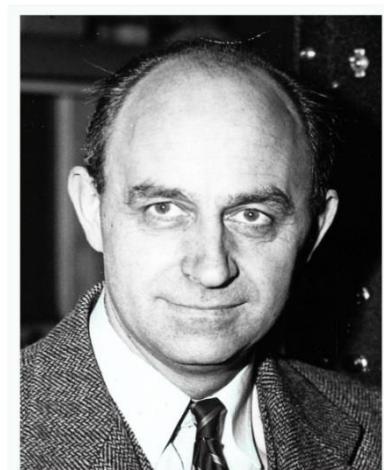
❖ “为祖国健康工作五十年” $\approx 1.6 \times 10^9 \text{ sec}$

❖ “三生三世” $\approx 300 \text{ yr} = 10^{10} = (1 \text{ googel})^{(1/10)} \text{ sec}$

❖ 宇宙大爆炸至今 $= 4 \times 10^{17} > 10^8 \times \text{一生}$



Eratosthenes
(276 ~ 194 B.C.)



Enrico Fermi
(1901 - 1954)

实例：全国人口普查数据的排序

