1.绪论

算法分析

封底估算

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

- Francois Arago

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Back-Of-The-Envelope Calculation

- 地球（赤道）周长 ≈ 787 x 360/7.2

  = 787 x 50 = 39,350 km

- 1天 = 24hr x 60min x 60sec

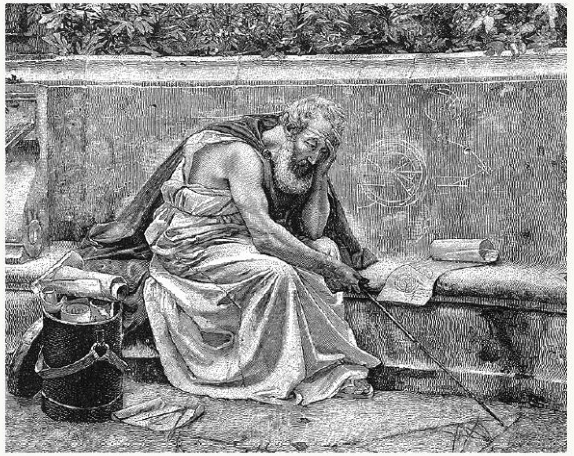
  ≈ 25 x 4000 = 10^5 sec

- 1生 ≈ 1世纪 = 100yr x 365 = 3 x 10^4 day = 3 x 10^9 sec

- “为祖国健康工作五十年” ≈ 1.6 x 10^9 sec

- “三生三世” ≈ 300 yr = 10^10 = (1 googel)^(1/10) sec

- 宇宙大爆炸至今 = 10^21 = 10 x (10^10)^2 sec



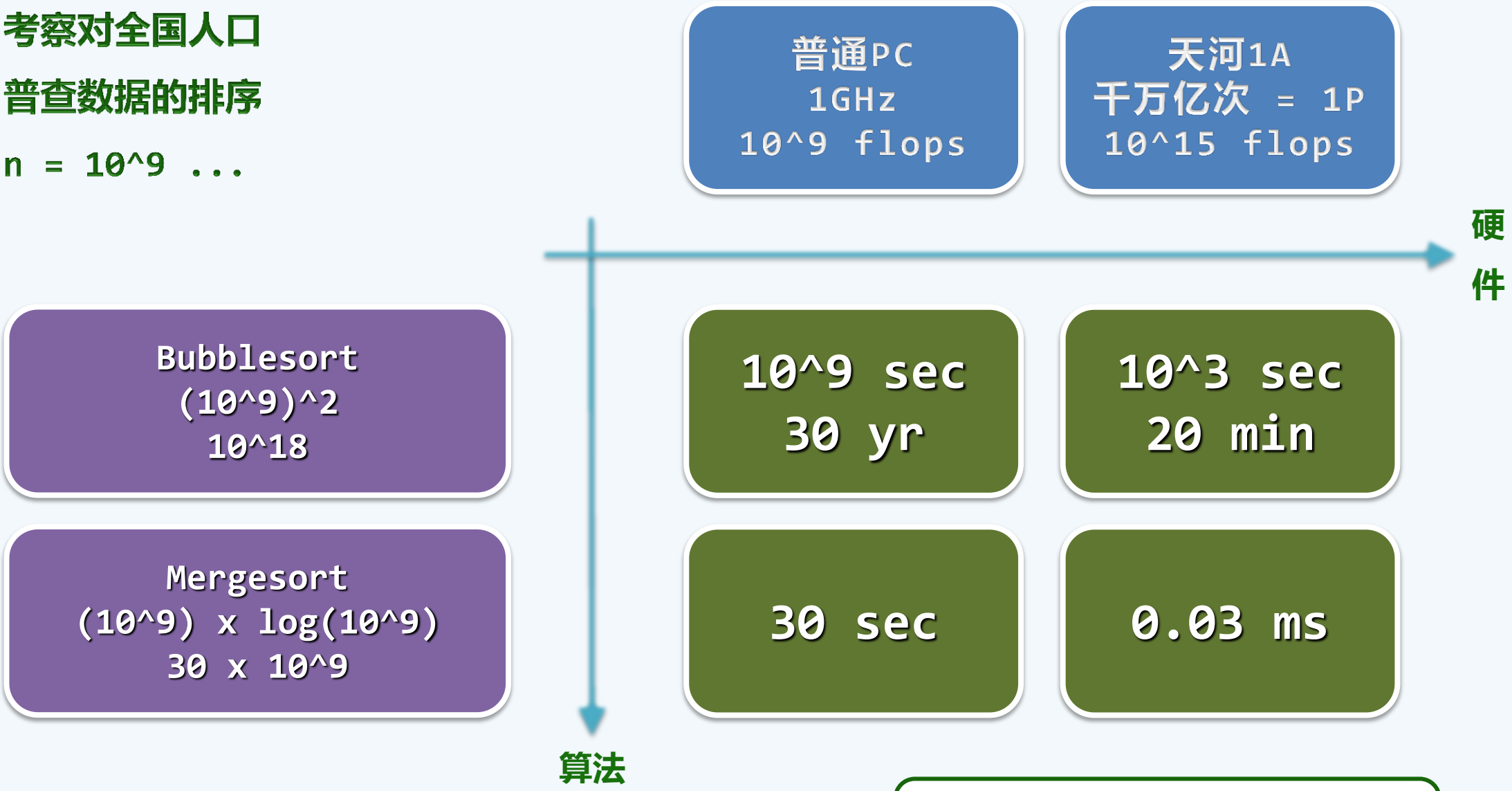
Eratosthenes
(276 ~ 194 B.C.)

Enrico Fermi
(1901 - 1954)

Back-Of-The-Envelope Calculation

❖ 考察对全国人口普查数据的排序

n = 10^9 ...



课后

- 试按照“不变性+单调性”的模式，归纳证明本章各算法的正确性
- 试举例说明，O1Operation()对循环体的复杂度也可能有实质影响
- 学习不同开发环境提供的Profiler工具，并藉此优化你的程序性能
- 习题[1-32]