PrefixSum

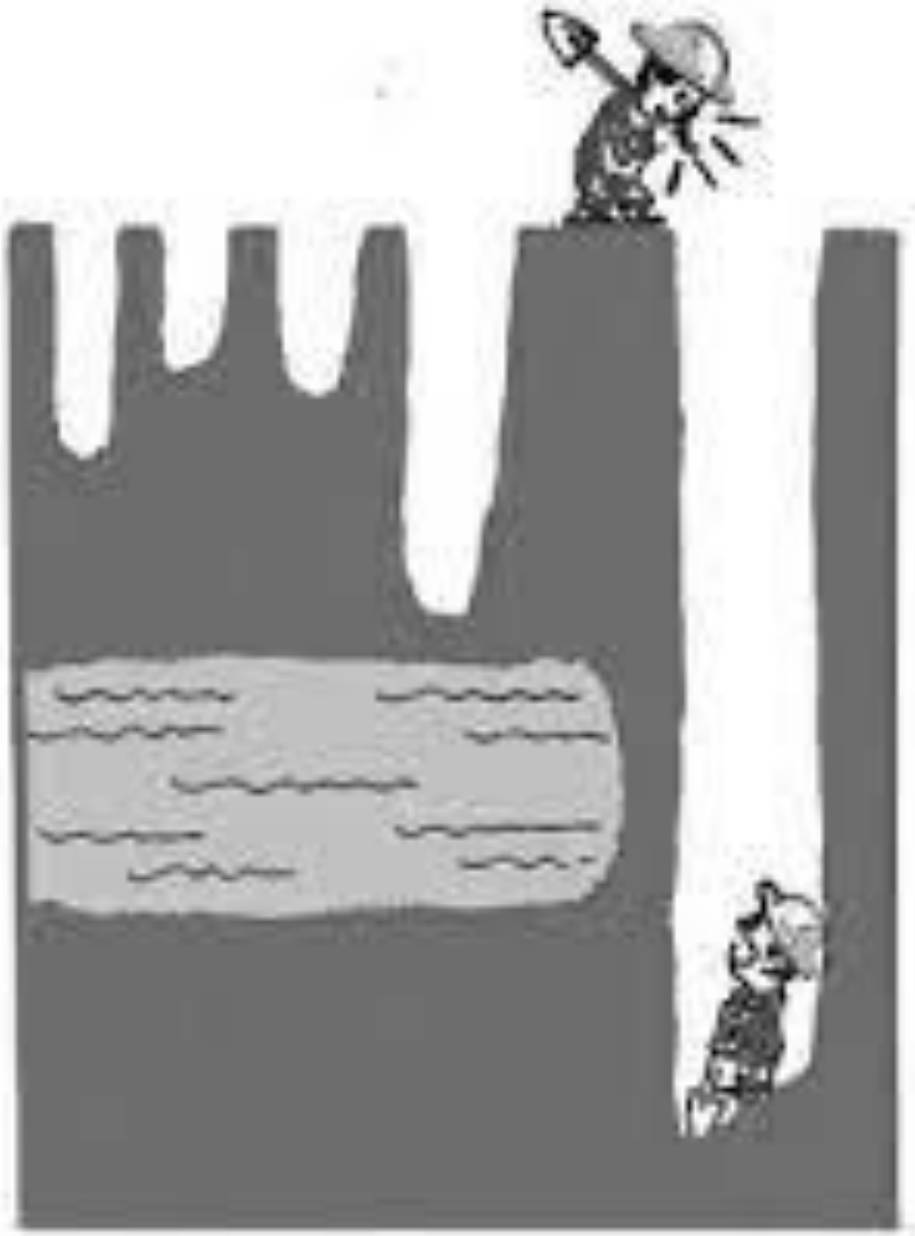
Oliver

纯属抛砖引玉

- 欢迎大牛补充！
- Disclaimer: 不做商业用途。本整理纯属用于非盈利学习。部分资料来源于互联网。

《挖井》

- 有一位年轻人问一位大师：“大师，我们在人间为人处世太苦了，有什么方法可以教我吗？”大师就说：“两个人在挖井，一个人很会动脑筋，而另一个人很笨。两人挖了两米深，都没看到水，笨人继续挖，聪明精干的人就换了个地方挖，最后笨人挖到了水，而聪明人换来换去一无所获。
- 大师继续说故事：“聪明人经过数次尝试，发现了一个水源；而笨人埋头苦干越挖越深，本来挖到的一些水并不是水源，所以他付出很多，但最终没有找到水源。
- 大师笑笑，说：“这个故事还没讲完，这两个人虽然竭尽全力，聪明人换了很多地方，笨人拼命往下挖，两个人还是没有挖到大水源。”年轻人说：“那我们做人有没有处世的准则和哲学？”



T-Shaped Developer/ Engineer

Benefits of adopting T-Shape mindset:

- Development team members strengthen existing skills and learn new skills
- Remove silos within the team, bridge gaps and be cross-functional
- Increase team utilization and velocity by not playing the "waiting game"

Analyst	Programmer	Test Engineer	Web Designer	System Engineer
Write Executable Documents	Write Unit Test Code (xUnit)	Write Automated Tests	UX Design	DevOps
Requirements Engineering	Write Production Code	Functional Testing	Java Script, HTML, CSS, LeSS	Python, Perl, Go, shell
Write User Manuals	Design System Architecture, DB	Write Test Plan	Image, Icon, Logo Design	System and OS
…	…	…	…	…

Broad

Deep

Ideal Scrum Developer

延伸阅读Big Tech Blogs

- The Airbnb Tech Blog
- Uber Engineering
- Netflix Tech Blog
- Dropbox Tech Blog
- Twitter Engineering
- Facebook Tech Blog
- LinkedIn Engineering Blog
- Google Developers
- Mozilla Tech Blog
- AWS Architecture Blog
- All Things Distributed AWS CTO's Blog

前缀和

定义prefixSum[i] = 前i个数之和。 (index from 0 to I - 1)

前缀和

- Then how to calculate the sum from A[i] + A[I + 1] + … + A[j]???
- prefixSum[j + ?] – prefixSum[I + ?]

习题列表

- LintCode 265. Maximum Non-Negative Subarray
  - LintCode 41. 42. 43. 620. 621. 722.Maximum Subarray （1~6）
  - LintCode 45. Maximum Subarray Difference
  - LintCode 1083. Maximum Sum of 3 Non-Overlapping Subarrays
  - LintCode 1724. Maximum Sum Circular Subarray
  - LintCode 868. 617. Maximum Average Subarray （1~2）
  - LintCode 1567. Maximum Can Exchanged Subarray
  - LintCode 406. Minimum Size Subarray Sum
  - LintCode 911. Maximum Size Subarray Sum Equals k
  - LintCode 191. Maximum Product Subarray
  - LintCode 1073. Maximum Length of Repeated Subarray

例题

- LintCode 1844: 求和 =k 的最短的子数组
  LintCode 1507: 求和 >=k 最短的子数组

例题

- LintCode 41 · 最大子数组 : xxx https://www.lintcode.com/problem/41/
- LintCode 44 · 最小子数组 : xxx https://www.lintcode.com/problem/44/
- LintCode 138 · 子数组之和 : xxx https://www.lintcode.com/problem/138/
-

LintCode 41 · 最大子数组：xxx
https://www.lintcode.com/problem/41/

- 解题报告https://www.lintcode.com/problem/41/solution/34396

LintCode 44 · 最小子数组：xxx

https://www.lintcode.com/problem/44/

LintCode 138 · 子数组之和：xxx

https://www.lintcode.com/problem/138/

TBC

Q & A

- 踊跃发言

Thank You!

- References:
- https://github.com/donnemartin/system-design-primer
- https://zhuanlan.zhihu.com/p/303205010