

## 1, Facebook 三次电面分享12.21

[http://www.1point3acres.com/bbs/forum.php?](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=216917&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

[mod=viewthread&tid=216917&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=216917&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

一面：白人女面试官

1. LC 56

2. 移除最少的括号使字符串匹配（这道题我当时并不知道是面经题，虽然看过但是忘记了，面经看的太不认真了，但我因为对LC 301很熟悉，这道题可以认为那道题简单版，所以方法类似就也算是做出来了）

这次是楼主人生第一次面试，紧张成狗，代码基本上都是下意识写出来的..... 两个题都有一个小 bug，被面试官含蓄的指了出来，本来以为要挂了，不过两天后收到面试通知。

二面：白人小哥

1. LC 253，这道题我用 swipe lines algorithm 做的，用 heap 也可以

2. Insert interval，基本上就是 LC 57，稍微有一点点改动，他们叫 RangeTracker，就是实现一个类，有两个函数，一个是 add，就是 insert interval，另一个是 getTotal，就是返回这些 interval merge 之后总的的时间，这道题也是面经原题，我当时是做过的。

这次面试感觉很好，跟面试官聊的很开心，我觉得发挥的也不错，bug free 而且写的也比较顺畅。本以为就结束了，结果面试完半小时收到第三面的通知。我估计加面的原因可能是第一次发挥的不好，或者是因为楼主专业不相关（楼主是 civil 的）

三面：印度小哥

1. 反向打印链表，面经原题，我一开始三行 recursive 搞定了，小哥觉得不够，又让我写一个 iterative 的，O(1) space，就是反转链表再恢复，于是又7-8行搞定了，但是因为小哥不太懂 python，解释了半天语法

2. LC 17，这个题我又是一开始三行搞定了 (iterative)，因为小哥不太懂 python，又解释了一下，然后让我用 recursive 的方法写，我就又写了一下。

3. Binary Tree Paths，基本上也是原题，稍微有一点点改动，说是还给了一个 target value，如果遇到 target 就重复打印出到 target 的路径，这个可能不太好理解，我举个例子，比如有一个 root to leaf path 是 1 2 5 2，target 是2，那么这个 path 就应该打印成 1 1 2 5 1 2 5 2。每次遇到 2 就把前面的路径重新 append 一下：1 (1 2) 5 (1 2 5 2)。感觉就是为了出题而出题，没啥意义，也没什么难度。我当时一看时间还多，我就写了一个 iterative 的 post order build path 的一个方法，只需要 O(h) space 的。

## 2, fb实习三面新题，12.17

[http://www.1point3acres.com/bbs/forum.php?](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=216423&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

[mod=viewthread&tid=216423&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=216423&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

面试官说先从一个简单的问题开始，给一个string，找出string中出现次数最多的字母，快速的写了个map count的算法；之后follow up: 如果不算空格呢？不算其他字符呢？大写小写字母都算相同字母呢？算法的时间空间复杂度？O(n)的时间怎么优化？这个问题纠结了很久，开始说如果变成O(logn)需要用binary search，但是需要sorted string，最后说这个方法不行。那么面试官提示说不然少读一半的字母，或者少读一个字母也算优化。。。最后想了和出现频率最高和第二高的字母相关，频率相减如果大于剩下的字母就可以直接return了，最后讨论是大于还是大于等于，仔细思考一下大于等于也可以。。。。

## 3, FB 2017 intern面经11.23

[http://www.1point3acres.com/bbs/forum.php?](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=213079&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

[mod=viewthread&tid=213079&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=213079&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

1. 给出两棵树的前序遍历，寻找第一个值不同的叶节点

2. 不同decode方式数目

3. 3sum

## 4, FB 12月15号 intern 一面 跪经

[http://www.1point3acres.com/bbs/forum.php?](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=217602&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

[mod=viewthread&tid=217602&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=217602&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

1. 给一个string "123456789"，进行 arithmetic operation combination。比如：123 + 456 + 78 - 9 是一种组合，-1 + 2 - 3 + 4 - 5 - 67 + 89 也是一种(只用加 + 或 -)，打印出所有结果等于 100 的组合，没有想出有什么最优解，直接backtracking 暴力，用一个sum 记录前面的结果，不过到后来string 处理有问题，但是时间已经过去很多了，问我怎么修正，我大概说了下就开始第二题了

2. longest increasing subsequence，当时时间不多了，可能 6，7分钟，受第一题影响大脑已经转不了，来了个暴力，本来想improve，没时间了。

## 5, FB实习面经12.13

[http://www.1point3acres.com/bbs/forum.php?](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=215936&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

[mod=viewthread&tid=215936&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=215936&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

第一轮：

Infrastructure组的，3SUM。follow up 优化空间，2pointers过。follow up K sum，面试官想要的是recursion，我给了一个iteratively build hashset的方法，空间复杂度我后来想了想有点难看，但是时间做到了最优，面试官比较满意，也没有细问。这套题目能正确回答big o很重要面试官很在乎。

第二轮：(powerset=subset)

Machine Learning组。Merge Intervals，先给了个in place的做法，follow up换成输出一个new list，都秒了，解决了一个小bug，这个时候大概25分钟，面试官说差不多了犹豫要不要再出题，我让他继续，就又做了一题powerset，给了个iterative的解法，又有点小bug（不得不说面试真的很容易紧张犯错弄出平时刷题不会出的错）。稍微debug了一下，面试官又犹豫要不要继续出题了。。我让他继续，就follow up了powerset iterator，时间不够了给了思路，然后follow up big o。这轮面试官好像看到我把第一题秒了就已经想让我过了，强行被窝揪着又出了几题。。。还挺有意思的。

## 6, 脸书一面 攒人品12.23

[http://www.1point3acres.com/bbs/forum.php?](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=217150&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

[mod=viewthread&tid=217150&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=217150&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

1. 原题 判断回文

2. subset1 变种，subset会做肯定能做出

3. 原题 链表逆序输出

## 7, 5分钟前fb实习一面11.11

[http://www.1point3acres.com/bbs/forum.php?](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=210036&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

[mod=viewthread&tid=210036&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=210036&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

1. first bad version

口头run test case

2. 有点像LC 297，但是是BST，而且给出了一个preorder的list，没有#标识符表示空节点；之后我提出来如果没有标识符好像没法知道是不是空节点.....脑子抽了一下，应该用BST的性质；之后提示说可以每个节点加一个parent.....

## 8, FB 实习二面11.23

<http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=213032&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311>

1. Validate BST
2. Dot Product, 两个follow up, Sparse, long and short
3. valid palindroma

9, fb intern两轮电面12.21

<http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=216889&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311>

第一轮：过了简历后三道题。1: 3sum（没有重复数字； 2: sort color； 3: first bad version

第二轮：上来直接做题。1: merge two sorted array； 2: merge k sorted array； 3: count and say

10, 新鲜fb二面面经12.22

<http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=216986&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311>

刚面的fb二面。

lc340变体，返回substring而不是长度。

11, FB 一轮电面 12.14

<http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=216087&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311>

问了两题 都是lc fb tag原题， lc252, lc253

第一题很顺利的写完了，然后问了meeting rooms II，简单和面试官说了一下思路，然后面试官告诉我不能用PriorityQueue做，只好现想答案，中间想到一个recursion的但是也不行，最终用了两个arrays把start和end time分别找出来然后sort做的，面试官说good，然后就开始让我问问题，大概问了两三个问题后，结束面试。

12, 12.20 实习面试

<http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=217034&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311>

两道题，一道对sorted array的数字平方后排序，一道是给一个数组，至多允许swap数组里的任意两个数字一次，问是否可以通过swap实现数组排序。

13, Facebook 实习一轮面经 求人品12.9

<http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=215398&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311>

Number of Islands

14, 脸家两轮电面 12.22

<http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=217046&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311>

第一轮是一个国人小哥，先叫我做自我介绍然后问了下project，然后开始做题。

第一题是Count and say的变形，感觉比lc原题要简单一些；第二题是Task schedule with cool down time...好像是经典题 然而看面经我并没有看到这题 中途题意还理解错了然后小哥很好心的提醒了我

第二轮是国人妹纸，也是5分钟的自我介绍+project。

第一题是isValid Palindrome，第二题是Decode ways，给了dp做法然后叫我optimize空间复杂度。

15, FB实习面经12.22

<http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=216990&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311>

11.14一面：白人姐姐。就一道电话号码（利特扣得拾柒）。楼主一直是用迭代做的，结果面试官上来让递归，于是愣住了，思考10几秒后开始写。写完后面试官说要打印不要返回，于是马上改。改完后问时间空间复杂度。问空间上能否优化。由于我一开始写的是返回版的，空间用的太多，只好重新写了字符串作为参数的层层深入加字符版，在最内层递归直接打印。完了继续问空间复杂度。

11.28二面：白人哥哥。吸取上次教训，这次把地里的面经刷了好几遍，对follow up格外关注。而且之前一直有个误区，听其他人说面试时千万不能冷场，于是我一直以来都是很怕没话说，即使在写code的时候也是嘴没停下来过。然而lz有电话恐惧症来的。。。不仅打电话听不懂，说话紧张（即使是中文也不行），而且说太多导致一心二用时写code会比较慢而且对方听得很烦。后面终于搞明白，其实是在没有思路时不能不说话而已，写code时是可以埋头写就好的，顿感轻松很多。上来直接双指针那道经典题（利特扣得柒拾陆），5分钟大概就秒了。面试官问了时间复杂度，也没有其他follow ups了。然后看时间还早，又加了一道3萨姆（利特扣得拾伍），为了假装没刷过（毕竟刚刚的表现明显是刷过的。。。)

16, 1.6 F家实习面试

刚刚结束的面试， decode ways。一道题， follow up: constant space. 各种手误，不忍直视.....move on move on

17, Facebook 面经题目12.19

Given two pre-order traversal arrays of two binary search tree respectively, find first pair of non-matching leaves.

Follow Up: If they are general binary trees instead of BSTs, could you solve it? give out your reason.

补充内容 (2016-12-19 10:55):

还有一个相关题目：

Given two (binary) trees, return the first pair of non-matching leaves

Tree 1: A, B, C, D, E, null, null

Tree 2: A, D, B

Output: (E,B)

18,脸谱挂经11.30

遇到了国人，出了个three sum，另一道题很奇葩，判断一个图是否是Bipartite的

19,脸书跪经1.6

<http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=218545&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311>

tion%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311  
一共三轮，最后还是跪了。一轮minmum window substring. 第二轮找interval里面出现最多次数的点。第三轮 一百三十九，加follow up. 明年full time再战。

## 20, fb 跪经 1.6(wen)

[http://www.1point3acres.com/bbs/forum.php?](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=218509&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

mod=viewthread&tid=218509&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311

一个m x n 的 array 只有 0 和 1 给一个 int k

需要把 小于 k 数量 连续的 1 变成 0

连续： 上下左右和四个斜线方向

面试官是个中国女孩

## 21, FB Intern 电面 1.6

[http://www.1point3acres.com/bbs/forum.php?](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=218482&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

mod=viewthread&tid=218482&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311

面了一道run length encoding的题目

要求就是写个function实现run length encoding

然后input是binary的

说实话很懵=。=因为之前完全没准备过run length encoding相关的

面试官人很好 只是我写的太差了

## 22, 回馈地里，报三家面经 12.17

先聊了下简历，然后问了一道behavior：举个例子你是如何说服别人的。然后是假设现在只有like一种reaction，设计一个metric来决定是否有需要增加除了like之外的reaction，怎么知道该加什么reaction。最后coding很简单，就是合并两个已排序的序列

## 23, 超级新鲜店面 facebook round 2 12.21

[http://www.1point3acres.com/bbs/forum.php?](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=216869&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

mod=viewthread&tid=216869&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311

听不出口音的小哥，准时打来电话，简单寒暄了一下。10分钟 开始干题

上来写一个fibonacci 函数，先跟他说了下，最直接方法是递归，不过递归太慢，好多重复运算。所以我们O(n) time, 写完后，让我test，写了每一个loop

中变量是怎么变化的。10分钟

第二题 lc decode ways. 他跟我说这是他们工程上会用的。balabala，说了一堆，描述半天，才反应过来就是 decode ways. 然后开搞，15分钟搞完，每一步讲解啥意思。

5分钟测了三个testcases。最后他说问问题吧。问完刚好 45分钟。

## 24, Facebook 二轮面经与总结经验 11.29

[http://www.1point3acres.com/bbs/forum.php?](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=213810&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

mod=viewthread&tid=213810&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311

第一道是大小端机器的判断。我这个真的不会，思考了一会跟面试官坦白，他说没关系，我们下一题。第一题可以参考这里：<http://www.geeksforgeeks.org/little-and-big-endian-mystery/> java没法做

第二道是树的题， LC 297.

## 25, 脸家 10.17 实习 第二轮电面 10.18

[http://www.1point3acres.com/bbs/forum.php?](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=206262&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

mod=viewthread&tid=206262&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311

Convert binray search tree to circular doubly linkedlist

## 26, 补个面经，脸家 二轮电面 12.16

[http://www.1point3acres.com/bbs/forum.php?](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=216272&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

mod=viewthread&tid=216272&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311

一面： lc 297. output 是一个list。写完后面试官给了一个follow up，貌似是c++的问题，但楼主没有怎么用过c++，具体什么忘了。

二面： lc 29 和 二叉树转化成循环双链表

## 27, Facebook 实习电面加ONSITE 12.20

[http://www.1point3acres.com/bbs/forum.php?](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=216758&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

mod=viewthread&tid=216758&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311

第一面是decode way 和 task cooldown

decode way 让我优化空间，我用的滚动数组，还出了bug，还好改过来了

task cooldown 我说了下用hashmap的思路，让我写空间时间复杂度

然后问我如果task类别有很多怎么办，我说那就用hashmap保存时间窗，他让我写下时空复杂度，没时间写代码了

第二面onsite

menlo park真的好棒！

只有一个问题，trie树 check 和add 有通配符"."

## 28, Facebook 电面面经 12.11

[http://www.1point3acres.com/bbs/forum.php?](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=158720&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

mod=viewthread&tid=158720&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311

1. 非原题，但不是太难。给一个linkedlist，里面的element都排序好了，但是是一个blackbox，有三个function可以调用。pop()随机pop出最前面或最后面的element，peek()随机偷看最前面或最后面的element，isEmpty()回传linkedlist是不是空了。问设计一个资料结构，list或是array都可以，把linkedlist里面所有的element都拿出来，并保持他们的排序。followup是如果不能用peek()该怎么做。

2. 原题，valid tree graph。

第二面： security组nice老美小哥， Virginia Tech CS PhD，和他面试如沐春风。都是原题，每题都会要我手动测试执行他给的范例，并给出complexity。

1. Move zeros.

2. Telephone number combination的变形，变成用这些组合测密码，有个回传密码是否正确的函数可用，问正确的密码。

## 29, 脸书 实习 三次电面 11.29

<http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=213819&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311>  
10/20/2016:  
divide integer 和 integer to english words.  
白人小哥，都是原题，当时没刷题都不知道是原题，写的都有很多bug，小哥也不提醒有bug就说可以。本以为挂了，第二天hr发信说让我第二次好好practice，希望看到更加strong的coding能力，还给了我个链接让我practice也是醉了

11/15/2016:  
random pick max number index with equal probability, lc398改版，问为啥能保证probability相同，第一次写了two pass（先找到最大值，再random pick），让改写one pass  
还有一道没见过：是interval的题  
公司有好多employee，给出入职和离职的时间段，打印出每个时间段的在职人数  
输入：  
[1, 2005, 2016]  
[2, 2008, 2014]  
[3, 2006, 2008]  
[4, 2010, 2014]  
输出：  
2005-2006: 1  
2006-2008: 2  
2008-2010: 2  
2010-2014: 3  
2014-2016: 1  
也是白人小哥，人很nice，第二题各种提醒我。最后我把所有时间排序，不管是入职还是离职时间

11/22/2016:  
add binary，问了我为啥不用string做，用string做的时间复杂度是多少。我说 $n + (n-1) + \dots + 1 = O(n^2)$   
two sum with duplicate number，返回所有的可能的index pairs，我用的是map<Integer, Set<Integer>>  
**30, Facebook Intern Onsite 跪经 12.10**  
<http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=215501&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311>  
Binary Tree Serialization & Deserialization  
**31 FB 电面跪经 12.7**  
<http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=215063&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311>  
题目是 serialize and deserialize binary tree。（类似 LC 297）  
**32, Facebook Intern 两轮 12.7**  
<http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=215041&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311>  
11月18第一轮，米国大哥，One edit  
12月1第二轮，大哥忘了，改到2，米国大哥，previous permutation(last permutation改版)  
**33, 脸家实习一轮 12.6**  
<http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=214940&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311>  
1. dot product 然后问了一长一短则么办，时间空间复杂度等等

2. Deep Copy 一个 Graph，相当于LC133的变种吧，因为Graph里面不一定所有node都相连，但是基本思路一样，被面试官指出了一个bug。。。希望不会影响听说最近bar高了。。。。。  
**34, Facebook 实习二轮**  
<http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=216126&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311>  
\* Calculates a to the power of b, mod c  
\* distribution law for modulo:  
(x\*y)%z == ((x%z)\*y)%z == (x\*(y%z))%z  
\* Examples:  
PowMod(2,3,5) = 2\*2\*2 % 5 = 8%5 = 3  
PowMod(3, 6, 7) = 3\*3\*3\*3\*3\*3 % 7 = 729%7 = 1  
PowMod(16,16,5) = 1 \*

typedef unsigned int uint32;  
**35, 12.2 最新FB二面 12.3**  
<http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=214553&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311>  
就一道题：regular expression 前面聊了十分钟项目  
**36, Facebook Intern 二轮电面，求加精 12.17**  
<http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=216379&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311>  
输入一个task序列，比如A, B, C, A, B, C  
再输入一个整数，cooldown。cooldown 代表每个task从开始执行到结束，要多少个step才会cooldown，在这期间同一种task没法同时执行。  
输出是，给出一个序列以后，输出需要多少step才能完成这个序列。

**37, facebook 实习一面 + 二面 11.19**



<http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=211300&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311>

word break 输出一组解

二面, 11.17 印度人

Integer to english words

Next Permutation

38 FB 11.18 一面 11.18

<http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=211232&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311>

LC 297. Serialize and Deserialize Binary Tree

39 FB 两轮实习电面跪经 12.15

<http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=216172&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311>

第一轮

BQ: 简历, 对FB的了解, 对FB哪个Product比较感兴趣, 说了15分钟

```
['a', 'b', 'c'],  
['d', 'e', 'f']
```

给一个二维的char board, 打印所有从(0, 0) 到右下角的路径。DFS解法

follow up是如果board很大, 怎么优化。答用stringbuilder。有小bug, 提醒下改正。

到这还剩5分钟, 让我问问题。

第二轮

随便聊了一下简历 5分钟, 开始做题, 也只做一道

给一个sorted array, 返回一个square sorted array, 要求O(n)

40 facebook实习挂经 12.10

<http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=215559&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311>

题目: 矩阵中由1构成的一横一竖的连续的1, 并且这一横一竖有一个交叉点的, 是一条十字路

总的来说对每一个1: 和他在同一列上, 与他相连的连续的1的数量 + 和同他在同一行上, 与他相连的连续的1的数量 的和 就是以当前1为交叉点的十字路的长度

找出矩阵中最长的十字路。

举几个例子吧

```
0 0 0  
1 1 1  
1 0 0  中最长的十字路长度是4
```

```
0 0 1 0 0 0  
0 0 1 1 1 1  
1 1 1 0 1 0  
0 0 1 0 0 1  
    中最长的十字路长度是7
```

41 fb二面12.14

<http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=215980&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311>

第一题, LC10, followup: 问优化空间, 没有写。

第二题, reader writer problem,

给定:

```
Mutex:  
    void lock();  
    bool unlock();
```

```
SharedMutex:  
    void readerLock();  
    void readerUnlock();  
    void writerLock();  
    void writerUnlock();
```

42脸书面经 + 换组求助 12.6

<http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=214897&extra=page%3D1%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311>

1: add binary, 2sum

2: decode ways

3. combination sum, followup: sorted opt solution (DP)

3: followup LC377

43, FB Intern 一面 11.8

<http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=209544&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311>

6sortid%3D311

1. LC 394. Decode String, 很新的一道题啊, 而且给的时候没有描述只有四个demo, 导致我没太理解这个encode方法所以其实到最后还是有bug没处理的, 但是烙印似乎没看出来, 就说 awesome, next problem

2. LC 380. Insert Delete GetRandom O(1) 这真是日狗了, LC hard题目, 好在做出来了, 比第一个强一点, 按时完成

#### 44, 12.5 facebook intern 12.6

[http://www.1point3acres.com/bbs/forum.php?](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=214919&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

[mod=viewthread&tid=214919&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=214919&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

1. 给一个数组, 都是整型, 比如[1, 2, 3]。取每个数乘以2, 输出结果数组。有点类似string multiplication。

follow up: 如果不reverse结果数组, 要怎么做。回答用queue。

2. increasing triplet LC原题 问怎么test code, 要求考虑corner cases。

#### 45, 脸家第一轮店面 12.6

[http://www.1point3acres.com/bbs/forum.php?](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=214933&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

[mod=viewthread&tid=214933&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=214933&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

题很简单: Print a single linked list reversely

#### 46, FB第二轮店面: LC 27+ 230 +39 + BQ 12.9

[http://www.1point3acres.com/bbs/forum.php?](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=215360&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

[mod=viewthread&tid=215360&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=215360&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

LC 67 Add Binary

LC 230 Kth Smallest Element in a BST

LC 39 Combination Sum

#### 47, 刚刚的FaceBook面经

[http://www.1point3acres.com/bbs/forum.php?](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=215839&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

[mod=viewthread&tid=215839&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=215839&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

1. two sum, 只要返回true or false. follow up: how to test your function. 不要求写test case,

2. 给你一个 api, getfriends () , 输入是一个user id, 大概是getfriends(1) -> [2, 3], 输出的user friends' ids, 完成一个function 求出两个user 共同的朋友。写到一半, 面试官说下一题。

3. 给一个user id, 找出潜在的朋友, 这个定义是不是自己朋友的朋友的朋友, 有点绕, 大家自己体会一下。LZ 使用了hashmap, 和两次for loop, 最后没写完, 面试官确认了思路之后说我觉得我能做出来。

#### 48, 连输店面 12.8

[http://www.1point3acres.com/bbs/forum.php?](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=215212&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

[mod=viewthread&tid=215212&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=215212&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

lc有一个类似的题, binary tree 从root到leaf的所有path, 只不过用list存结果, 不是string。

用递归做了, 结果那哥们看不懂, 解释了一次又一次, 跑case, case, , 然后有一段时间不说话, 我问他还有问题吗, 他在说, 我觉得你的case 太简单了。。

#### 49 FB intern 1st round 12.3

[http://www.1point3acres.com/bbs/forum.php?](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=214582&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

[mod=viewthread&tid=214582&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=214582&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

1. binary tree paths (LC257) 要求打印出path, follow up: 1. 如果所有的node在一条线上, 时间复杂度。2 full binary tree 时间复杂度。3 优化时间复杂度

2. 给你一个数字n, 代表从1->n n个slot, 再给一个数组存着空slot的id. 让你同概率下randomly 返回一个非空的slot。

example:

n = 8, slots: 1,2,3,4,5,6,7,8

emptycells = {3, 5}

non empty cells: 1,2,4,6,7,8

return one of non empty cells randomly with equal probability.

#### 50, Facebook Intern 面经 11.12

[http://www.1point3acres.com/bbs/forum.php?](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=210154&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

[mod=viewthread&tid=210154&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=210154&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

windows里面的扫雷, 给一个h,w和m. 生成一个高度h, 宽度w, 总共m颗雷的矩阵。要求m颗雷随机分布。

第一个想法是把雷都放在前m个位置, 从m+1的位置开始产生一个index小于m+1的位置, 然后交换雷的位置。这一问写的磕磕绊绊, 然后结果居然swap function 写错了, 有个地方写太快把i写成了j。被指出来了之后很尴尬。

然后小哥又问了运行时间。说了是O(hw)。然后问能不能在O(m)时间内搞定。才想起来正确的reservoir sampling的写法。

#### 51, 10.20 Facebook intern 实习面经 10.24

<http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=207194>

21. Merge Two Sorted Lists

38. Count and Say

67. Add Binary

#### 52, fb intern一面题经 11.15

[http://www.1point3acres.com/bbs/forum.php?](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=210664&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

[mod=viewthread&tid=210664&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=210664&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

第一题 Strstr(), 当时正想说这考官看来没为难我。

第二题 leetcode 295: hard + 非fb tag. 我没做过。不知道要用PQ, 但给出了O(N)的 solution: 自己建一个node, 含有next node 和value, 然后连起来形成一个linkedlist. 用一个int count来知道现在list有多长了, 然后找median。

#### 53 FB半小时前一面 11.23

[http://www.1point3acres.com/bbs/forum.php?](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=213059&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

[mod=viewthread&tid=213059&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=213059&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

Q1: 移0, 秒了 Q2: 给一个正整数target和数组找是否有subarray sum等于target。。双指针秒, follow up有负数怎么办。。。我卡了半天。。最后10min想到hashset

都很简单。。感觉没发挥好

54 Facebook Internship 第二面11.12

[http://www.1point3acres.com/bbs/forum.php?](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=210281&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

[mod=viewthread&tid=210281&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311](http://www.1point3acres.com/bbs/forum.php?mod=viewthread&tid=210281&extra=page%3D2%26filter%3Dsortid%26sortid%3D311%26searchoption%5B3090%5D%5Bvalue%5D%3D2%26searchoption%5B3090%5D%5Btype%5D%3Dradio%26searchoption%5B3046%5D%5Bvalue%5D%3D2%26searchoption%5B3046%5D%5Btype%5D%3Dradio%26sortid%3D311)

1. 3Sum

2. 给定一个字典，查询字符串，要支持类似于“book”，“book...”，“..boo..”，这种查询

第一题比较顺利，第二题就是建立tire tree，然后递归查询，follow up是，如果模糊查询只有“...book”和“book...”这两种模式怎么处理，回答，只要建立顺序tire树，反序tire树，就可以了。