weblink: https://www.1point3acres.com/bbs/thread-552327-1-1.html
token(失效): 1a5454efab5ebf1deeb8c0
title: Lucid一面面经分享|lucid面经|一亩三分地海外面经版

图片请复制oss链接在新页面中打开

刷新页面会导致token失效

扣米附件下载,看工资 需要联系客服手动下载

['\n',

返回列表

回复: 8

[面试经验] Lucid一面面经分享

上一主题 下一主题 直达 跳转到指定楼层

🏷 码农类general   🏷 工作信息   🏷 求职   🏷 实习   lucid

wenhao.ge 2019-9-22 02:15:12 | 只看该作者 | 🔍试试Job多多 | 倒序浏览

🔗

19 主题 | 400 帖子 | 1256 积分

本楼: 👍 2   100% 0%   0 👎

全局: 66   100% 0%   0

发消息

2019(7-9月) **码农类General** 硕士 **实习**@**lucid** - 网上海投 - ||| 应届毕业生

本帖最后由 14417335 于 2019-9-26 18:37 编辑

周三的时候经历了Lucid的第一轮电面，以下是遇到的题目。第三题是红黑棋，可以在这里玩玩这个游戏：https://jasonhenline.github.io/bridges-and-bombs希望对大家能有帮助！另外请大家给我加米。谢谢了！

import java.io.BufferedReader;

import java.io.InputStreamReader;

import java.util.Arrays;

import java.util.Comparator;

public class Main {

  /*

    Part 1:

    Sort this array by the length of the string, then alphabetical order (case-

    insensitive). For example, a correctly sorted list might be:

    a

    D

```
        z

        vb

        afd

    */

    static String[] data = {"Lorem", "ipsum", "dolor", "sit", "amet", "consectetur", "adipisicing", "elit", "sed", "do",
"eiusmod", "tempor", "incididunt", "ut", "labore", "et"};

    static String[] sortedData() {

        Arrays.sort(data, new Comparator<String>() {

            public int compare(String s1, String s2) {

                //TODO: Fill in this function

                if(s1.length() != s2.length()) {

                    return s1.length() - s2.length();

                } else {

                    s1 = s1.toLowerCase();

                    s2 = s2.toLowerCase();

                    return s1.compareTo(s2);

                }

            }

        });

        return data;

    }

    /*

        Part 2: Write a small, reasonably efficient class that takes strings as input, and calls

        a callback method whenever a newline ("\n") is reached, passing in the previous line's

        text.  The class should discard old data when possible to save memory.

        Hint: This should not take more than about 15-50 lines of code.

    */

    static class LineParser {
```

```
public interface LineReceiver {

    void lineComplete(String line);

}

LineReceiver callback;

public LineParser(LineReceiver lineReceiver) {

    callback = lineReceiver;

}

StringBuilder sb = new StringBuilder();

public void read(String data) {

    //TODO: Fill in this function

    while(data.length() != 0 && data.indexOf("\n") != -1) {

        int i = data.indexOf("\n");

        sb.append(data.substring(0,i));

        callback.lineComplete(sb.toString());

        sb.setLength(0);

        if(i + 1 <= data.length()) {

            data = data.substring(i + 1);

        }

    }

    sb.append(data);

    callback.lineComplete(data);

}

}

/*
```

Part 3: Implement the board game Bridges and Bombs.

Play an online version of the game here:

https://jasonhenline.github.io/bridges-and-bombs

This game is played on an 9x9 board of squares between two players called X

and O. X plays first and then the players alternate taking turns. On their

turn a player claims an empty square.

Bridges

The goal for each player is to construct a bridge of claimed squares that

spans from one side of the board to the opposite side.

A bridge is a set of contiguous squares, where squares are considered

contiguous if they are neighbors either horizontally or vertically.

X must construct a bridge between the left and right sides of the board, and

O must construct a bridge between the top and bottom sides of the board.

If a player claims a square that completes their required edge-spanning

bridge and the bridge survives any bomb explosions, that player wins the

game.

Bombs

If a claimed square has no vertical or horizontal neighbors belonging to the

same player, it becomes a bomb. A bomb starts with a countdown timer of 4 and

after each player's turn the timer value decreases by 1. If a bomb timer

reaches zero, the bomb explodes, clearing its square and its four neighbor

squares.

Bombs are created each turn after any bomb explosions are resolved, so each

user's turn goes like this:

 1. The current player claims an empty square.

 2. Any bombs belonging to the player who just moved in neighboring squares

    of the claimed square are defused (their timers are set to undefined and

    they become regular claimed squares).

 3. All bomb timers are decreased by 1.

 4. All bombs with timer equal to zero explode, clearing their square and

    their neighbor squares.

 5. Any claimed square with no neighbors belonging to the same player is

converted to a bomb with timer set to 4, if it is not already a bomb.

6. If the claimed square survived the bomb explosions and it completes the

   user's bridge, the user wins the game.

7. If there are no empty spaces left on the board, the next player has no

   legal moves, so the player who just played wins the game.

Extra Credit

- Implement a computer player that always makes a valid move

- Implement a computer player that makes strategic move

```
 */

static class Game {

   enum Piece {

      X, O, EMPTY

   }

   /**

    * A board square.

    *

    * Contains the piece on the square an the timer.

    *

    * A negative timer value indicates that there is no timer.

    */

   static class Square {

      Piece piece;

      int timer;

      Square(Piece piece, int timer) {

         this.piece = piece;

         this.timer = timer;

      }

      Square(Piece piece) {
```

```java
        this(piece, -1);

      }

      Square() {

        this(Piece.EMPTY);

      }

    }

    /**

     * A 2-D position coordinate.

     */

    static class Coordinate {

      int x;

      int y;

      Coordinate(int x, int y) {

        this.x = x;

        this.y = y;

      }

      @Override

      public boolean equals(Object o) {

        Coordinate c = (Coordinate) o;

        return c.x == x && c.y == y;

      }

      @Override

      public int hashCode() {

        return new Integer(x * 31 + y).hashCode();

      }

    }

    private static int size = 9;

    private static Square[][] board;
```

```java
private BufferedReader inputReader = new BufferedReader(new InputStreamReader(System.in));

Game() {

    this.board = new Square[this.size][this.size];

    for (int x = 0; x < this.size; x++) {

        this.board[x] = new Square[this.size];

        Arrays.fill(this.board[x], new Square());

    }

}

/**

 * Gets the user move from stdin.

 *

 * Continues prompting the user for a move until the user enters a move

 * that is within the boundaries of the board. Does not do any other

 * move validity checking.

 */

private Coordinate getUserMove() {

    try {

        String text = this.inputReader.readLine();

        int x = text.charAt(0) - 'a';

        int y = Character.digit(text.charAt(1), 10) - 1;

        return new Coordinate(

            Math.max(0, Math.min(this.size - 1, x)),

            Math.max(0, Math.min(this.size - 1, y))

        );

    } catch (Exception e) {

        return this.getUserMove();

    }

}
```

```java
/**
 * Prints the current state of the board to the console.
 */
private void render() {
    System.out.println("    a  b  c  d  e  f  g  h  i");
    System.out.println("    o  o  o  o  o  o  o  o  o");
    System.out.println("   ------------------------------------------");
    for (int y = 0; y < this.size; y++) {
        StringBuilder lineBuilder = new StringBuilder();
        lineBuilder.append(y + 1);
        lineBuilder.append("  x | ");
        for (int x = 0; x < this.size; x++) {
            Square square = this.board[x][y];
            switch (square.piece) {
                case O:
                    lineBuilder.append('O');
                    break;
                case X:
                    lineBuilder.append('X');
                    break;
                case EMPTY:
                    lineBuilder.append(' ');
                    break;
            }
            if (square.timer >= 0) {
                lineBuilder.append(square.timer);
            } else {
                lineBuilder.append(' ');
```

```
        }

          lineBuilder.append(" | ");

        }

      lineBuilder.append("x");

      System.out.println(lineBuilder.toString());

      System.out.println("    --------------------------------------------");

    }

    System.out.println("     o  o  o  o  o  o  o  o  o");

  }

  // TODO: Implement this function.

  private void play() {

    Square s = new Square(Piece.X, -1);

    while (true) {

      this.render();

      Coordinate coordinate = this.getUserMove();

      // TODO: Don't accept invalid moves.

      // TODO: Alternate players.

      this.board[coordinate.x][coordinate.y] = new Square(Piece.X);

      // TODO: Defuse neighbor bombs belonging to the same player (set

      //  their timers to a negative value).

      // TODO: Decrement bomb counters by 1.

      // TODO: Explode any bombs where the timer has reached zero.

      // TODO: Convert any lonely claimed squares to bombs with timer set to 4.

      // TODO: Check if the current player won by making a spanning bridge.

      // TODO: If there are no empty squares left on the board, this player is the winner.

      }

    }

  /*
```

```java
        Test Driver

    */

    public static void main(String[] args) {

        System.out.print("Part 1:\n");

        for (String s : sortedData()) {

            System.out.println(s);

        }

        System.out.print("\n\nPart 2:\n");

        LineParser parser = new LineParser(new LineParser.LineReceiver() {

            @Override

            public void lineComplete(String line) {

                System.out.println(line.replace("\n", " "));

            }

        });

        parser.read("This is t");

        parser.read("he first l");

        parser.read("ine.\nAnd this is the second.\n");

        parser.read("And this is the third.\nAnd the");

        parser.read(" fourth.\n");

        System.out.print("\n\nPart 3:\n");

        new Game().play();

    }

}
```

面经	工资	内推	评价	讨论
87	**14**	**1**	**0**	**11**

基本工资	股票期权	签字奖励
$112,191	**$46,024**	**$4,637**
	(平均值)	

Lucid Software
(0)

查看更多Lucid Software相关主题 | 查看更多Lucid Software工资与职级

收藏 收藏16   评分 评分   分享 淘帖

🔴 **评分**

参与人数 **8**	大米 **+34**	理由	收起
☐ ek0917	+ 2	很有用的信息！	
☐ zhangyilin_zulu	+ 2	很有用的信息！	
☐ Giaosam	+ 2	很有用的信息！	
☐ Aria咩	+ 2	很有用的信息！	
☐ 早起的小米粥	+ 2	很有用的信息！	

查看全部评分

上一篇：FB Data Engineer Pass面经
下一篇：KLA昂赛

相关帖子

工作Vs. 藤校	亚麻BIE L4 ng求捞
Full-Stack 跳槽的问题 (5 yoe)	咨询一下 外企一般怎么投递简历
求 2025中国暑期实习 实时更新岗位汇总	关于HireRight 自己创业
某大厂被裁后找工 CPT学校在简历是加分项还是减分项	TikTok vs. Verily
unicareer对赌找工作靠不靠谱	上百场算法面试的软实力经验分享
2024找工总结与发现	Lucid Motors SWE interview
F-1签证期间在海外实习如何保持身份？求建议！	暑期实习intern该如何准备
ML PhD实习能找非research岗吗？	Lucid Design Release Engineer 挂经
亚麻VO挂了，心态有点崩	tiktok oa和账号合并问题
amazon 面试遇到烙印是否要换面试官	申请亚麻被秒拒

回复   使用道具   拉黑 举报

🖼 void 2019-9-22 02:29:31 | 只看该作者   🔗

34	208	383
主题	帖子	积分

发消息

本楼： 👍 0   0%   0%   0 👎

全局： 27   96%   4%   1

请问lz有收到后续吗?

回复   使用道具   评分 拉黑 举报

楼主 ｜ wenhao.ge 2019-9-22 03:02:05 ｜ 只看该作者

19   400   1256
主题   帖子   积分

发消息

本楼: 👍 0 0%
                    0%

全局: 66 100%
                  0%

0 👎

0

void 发表于 2019-9-22 02:29

请问lz有收到后续吗?

还没收到

扫码关注一亩三分地求职移民公众号
更多干货内容等你发现

回复   使用道具   评分 拉黑 举报

地里匿名用户   匿名用户-QLWYQ 2019-9-25 06:38:09

发消息   本楼: 👍 0 0%
                                                                                                    0%

0 👎

本帖最后由 匿名 于 2019-9-25 06:39 编辑

多谢lz，已经加米。zszszs

回复   使用道具   评分 举报

早起的小米粥 2019-10-12 07:13:01 ｜ 只看该作者

9   114   410
主题   帖子   积分

发消息

本楼: 👍 0 0%
                    0%

全局: 16 100%
                  0%

0 👎

0

请问楼主，这是面试的原skeleton吗

回复   使用道具   评分 拉黑 举报

楼主 │ wenhao.ge 2019-10-12 07:14:46 │ 只看该作者   🔗

19   400   1256   □
主题   帖子   积分   本楼: 👍 0   0%   0 👎
                                                              0%

发消息   全局: 66 100%   0
                                                              0%

耿嘉璐 发表于 2019-10-12 07:13

请问楼主，这是面试的原skeleton吗

是的。没错

回复   使用道具   评分 拉黑 举报

早起的小米粥 2019-10-12 07:17:15   │ 只看该作者   🔗

9   114   410   □
主题   帖子   积分   本楼: 👍 0   0%   0 👎
                                                              0%

发消息   全局: 16 100%   0
                                                              0%

wenhao.ge 发表于 2019-10-12 07:14

是的。没错

哦哦 谢谢楼主了

回复   使用道具   评分 拉黑 举报

aloofdobe 2020-9-16 09:40:25 │ 只看该作者   🔗

2   18   258   □
主题   帖子   积分   本楼: 👍 0   0%   0 👎
                                                              0%

发消息   全局: 11 100%   0
                                                              0%

楼主写完了吗？感觉好像最后还有一些没写

回复 　　　　　　　　　　　　　　　　　　　　　　　使用道具　　评分　拉黑　举报

楼主 ｜ wenhao.ge 2020-9-16 10:30:42 ｜ 只看该作者

19　｜　400　｜　1256
主题　　帖子　　积分

发消息

本楼： 👍 0 0%　　　　　　　0 👎
　　　　　　　　0%

全局： 66 100%　　　　　　 0
　　　　　　　0%

aloofdobe 发表于 2020-9-16 09:40

楼主写完了吗？感觉好像最后还有一些没写

没有写完，做不来

回复 　　　　　　　　　　　　　　　　　　　　　　　使用道具　　评分　拉黑　举报

返回列表

, '\n',

生活攻略　　　　　　　　　　　　　　　　　　　　　　　　　　　更多 >

第一次组装游戏PC？不要惊慌，本指南可以帮

新年礼物推荐 Amazon急速送达 来这里找

美国买房攻略：买房流程、注意事项、轻松好

【超全最新指南】如何给孩子办理美国护照？

【超全】适合携带的防身物推荐！以及家中必

, '\n']