Amazon OA3:

Reasoning

24 questions from aonecode.com

Pattern Search

I.   Implication

From A:B -> C:?

Based on the pattern between A and B, what it could induce for C

QPS:TSV -> IHK:?

LKN (+3 on each char)

46:64 -> 82:?

100 (B - A = 18, ? - C = 18) from aonecode.com

EAGLE:FZHKF -> THANKS:?

UGBMLR (+1 on even index, -1 on odd index)

FASTER:HCUVGT -> SLOWER:?

UNQYGT (+2 on each char)

985:874 -> 763:?

652 (-1 on each digit)

865:532 -> 976:?

643 (-3 on each digit)

ADBC:EHFG -> ILJK:?

MPNO (4 letters in a row and order goes like 1423)

JOHN:LSNV -> MARK:?

OEXS (+2 +4 +6 +8 on each)

COMPUTER:PMOCRETU -> TELEVISION:?

VELETNOISI (reverse left half and right half)

A17R:D12P -> G7N:?

J2L (First Letter in each unit: A + 3 = D, D + 3 = G, G + 3 = J; The

number in middle drops by 5; Last letter in each unit: A + 17 = R, D +

12 = P, G + 7 = N -> J + 2 = L)

COMPUTER:GKQLYPIN -> SENATE:?

WARWXA (even index +4, odd index - 4)from aonecode.com

KPQR:LRTV -> DGHY:?

EIKC (+1, +2, +3, +4)

ACFJ:CEHL -> PRUY:?

RTWA (+1, +2, +3, +4)

VAILANT:UBKJZOS -> TRANSCEND:?

SSCLRDGLC (2 letters in a pair. odd index pairs -1, +1; even index pairs

-2, +2)

27:24 -> 64:?

60 (24 = 3*3*3 - 3 = 27 - 3. 60 = 4 * 4 * 4 - 4 = 64 - 4)

MQD:KRK -> SWM:?

NCF (MQD is 13, 17, 4; KRK is 11, 18, 11. Rotate KRK by 1 step and

subtract the two sequences. Get 13 - 18 = -5, 17 - 11 = 6, 4 - 11 = -7.

S - 5, W + 6, M - 7 = NCF

ASSERTIVENESS-> SENSSAEVISTRE : MULTINATIONAL -> ?

ANOLUMITALNIT

Find arrangements of anagrams ASSERTIVENESS and

SENSSAEVISTREfrom aonecode.com

A in ASSERTIVENESS has moved to the 6th place in

SENSSAEVISTRE, create the mapping 1 -> 6.

The mapping goes 1,2,3,4,5,6,7,8,9,10,11,12,13 ->

12,11,10,3,2,1,9,8,7,13,6,5,4

Apply mapping on MULTINATIONAL and get ANOLUMITALNITfrom

aonecode.com

DELHI:CDAGH->MUMBAI:?

BJBAZH

Convert to ranks 4, 5, 12, 8, 9 : 3, 4, 1, 7, 8 -> 13, 21, 13, 2, 1, 9 : ?

Subtract EVERY digit by 1. From 12 get 01 because 1-1=0 and 2-1 = 1.

So 13, 21,13, 2, 1, 9 -> 02, 10, 02, 1, 0, 8 (BJBAZH)

AD5:ED9 -> XY?

? is sum of XY

II. Find Exception

- BGL DIN MRW **HLR**

  o HLR (difference from previous token is not fixed)from aonecode.com

- PRS TVX FIK LME

- **JLP** LNT TVZ DFJ

  o JLP (not product of 4)

- ABIJ DEHI MNQR STWX

- ADP QTS HKR STE

  o not sure. Choose 1 for not being perfect squares. Or choose QTS for bit & not

    being 0.

- **RHCAI** OEST HNDA ADEH

  o (RHCAI is not body part)from aonecode.com

- ADF MPR ILN EHJ

  o not sure. MRP does not start with a vowel

- STV XYA **KKT** BDE

  o KKT has two odds in it while others have two evensfrom aonecode.com

- 956 794 884 **678**

  o digits sum to 20

- 1,4,16 17,20,24 8,11,18 **19,20,5**

  o 19,20,5 (20 - 19 is not 3 and 5 is not a multiplication of 3)

- AE5 DF6 HN14 *KP2 *

  o KP2 (rank of P is not 2)from aonecode.com

- **HIK** DGJ LPT SUW

  o HIK does not have fixed difference between digits

- **LKJI** XYWV WVUT KJIH

- o might be LKJI, the only one that starts with an odd-ranked letterfrom aonecode.com

III. Induction

- 2,3,7,8,13,14,?
  - o 20 (Split the array into two by even and odd indices. Each has incremental difference 5, 6, 7 …)from aonecode.com

- 0,1,1,2,4,8,?
  - o 16 (sum of all previous numbers)

- 3, 6, 18, 108, ?
  - o 1944 (multiply the two previous numbers)

- 1,1,4,2,13,3,40,4,?
  - o 121 (1 + pow(3, 1) = 4; 4 + pow(3, 2) = 13; 13 + pow(3, 3) = 40, 40 + pow(3, 4) = 121)

- 3, 7, 13, 21, ?
  - o 31 (difference from previous number 4, 6, 8, 10, …)

- 5, 11, 19, 29, ?
  - o 41 (difference from previous number 6, 8, 10, 12, …)

- 0, 2, 6, 12, 20, ?
  - o 30 (difference from previous number 2, 4, 6, 8, …)

- 5, 9, 16, 29, ?
  - o 54 (5 * 2 - 1 = 9, 9 * 2 - 2 = 16, 16 * 2 - 3 = 29, 29 * 2 - 4 = 54)

- 4, 12, 6, 18, 12, 36, 30, ?
  - o 90 (even-indexed num = odd-indexed num * 3)

- 1, 5, ?
  - o 8 (1 + pow(2,2) = 5, 5 + pow(2,1) = 7, 7 + pow(2, 0) = 8)

- D, H, L, ?

  - P (same difference from previous)

- 10, 14, 23, 39, 64, ?

  - 100 (differences are 2*2, 3*3, 4*4, 5*5, …)

- 10, 74, 202, 394, ?

  - 650 (differences are 64 * 1, 64 * 2, 64 * 3, 64 * 4, …)from aonecode.com

- 2, 8, 5, 6, 8, ?, 11

  - 4 (odd indexed number has a difference of -2)

- 16, 30, 46, 62, ?

  - 83 (13 + 3 = 16, 29 + 1 = 30, 43 + 3 = 46, 61 + 1 = 62, 79 + 3 = 82; 13, 29, 43, 61,

    79 are primes. Select 1 prime in every 3.)from aonecode.com

- 1, 4, 27, 256, ?

  - 3125 (pow(n, n))

- 2, 5, 26, ?

  - 677 (1 + square of previous number)

Tips

About finding the pattern of letters and numbers:from aonecode.com

1. Get the letter <-> number table ready. It will save you a great amount of time!

2. When asking for an exception in the 4 strings given, convert the letters into numbers

and find the pattern with the numbers.

3. Some times the odd indices follow a pattern and the even indices follow another

pattern. Try looking at odds and evens separately.

- QPS : TSV -> IHK : (LKN)　都是+3
- 46 : 64 -> 82 : (100)　（差为 18）..也可能是 28

- EAGLE : FZHKF -> THANKS : (UGBMLR) +1, -1 找规律的（奇数+1 偶数-1）
- FASTER : HCUVGT -> SLOWER --> (UNQYGT) （+2）
- 985 : 874 -> 763 : (652)（每一位减一即可）
- 865 : 532 -> 976 : (643)（右边是左边每一位减三）
- ADBC : EHFG -> ILJK : (MPNO)（4 个一组）
- JOHN : LSNV -> MARK : (OEXS)（+2 +4 +6 +8）
- COMPUTER : PMOCRETU -> TELEVISION : (VELETNOISI)（镜像倒过来）
- A17R : D12P -> G7N : ？ （R=A+17）
- COMPUTER : GKQLYPIN -> SENATE : WARWXA（奇数+4 偶数-4）
- KPQR : LRTV -> DGHY : (EIKC) (前后相减每一位的增加分别为 1,2,3,4)
- ACFJ : CEHL -> PRUY : (RTWA) (前后相减每一位的增加分别为 1,2,3,4)
- VAILANT : UBKJZOS -> TRANSCEND : SSCLRDGLC (奇数对：奇数-1，偶数+1，偶数对：奇数-2，偶数+2)
- 27 : 24 -> 64 : (60)（24=3$^{3-3,64=43,43-4=60}$）
- MQD : KRK -> SWM : (NCF)（13, 17, 4；11, 18, 11；交叉 -5(13-18) 6(17-11) -7(4-11)）
- AD5 : ED9 求和
- BGL : DIN : MRW : HLR（差 5 差 6）
- PRS TVX FIK LME
- JLP LNT TVZ DFJ（感觉选 1，因为不是 4 的倍数？）
- ABIJ DEHI MNQR STWX（ABIJ 前后一对间距不同）
- ADP QTS HKR STE （选 1？都是完全平方数？，或者 QTS，位与的结果不是 0？）
- RHCAI OEST HNDA ADEH（RHCAI？只有这个不是身体部位？）
- ADF MPR ILN EHJ（2？只有它不是以元音开头？）
- STV XYA KKT BDE（其他都是两偶一奇，只有 KKT 是两奇一偶）
- 956 794 884 678（678，前几组加起来和都是 20）
- 1,4,16 17,20,24 8,11,18 19,20,5（感觉是最后一个，间距不是 3 的倍数）
- AE5 DF6 HN14 KP2（感觉选 KP2，因为 P！=2）
- HIK DGJ LPT SUW（1，因为不是等间距）
- LKJI XYWV WVUT KJIH（1？只有 1 以奇数开头？）
- 2,3,7,8,13,14,(20) （20？相差 4,5,6？）
- 0 1 1 2 4 8 (16)（16 前面的所有数加起来）
- 3,6,18,108,(1944) （18 * 6 = 108，所以应该是 18*108）
- 1,1,4,2,13,3,40,4,(121)（1+3 的 1 次方=4，4+3 的 2 次方=13，13+3 的 3 次方=40，40+3 的 4 次方=121）
- 3 7 13 21 (31) （相差每次增长 2）
- 5 11 19 29 (41)（相差每次增长 2）
- 0 2 6 12 20 (30)（相差每次增长 2）

- 5 9 16 29 (54) 5*2-1，9*2-2，16*2-3，29*2-4

- 4 12 6 18 12 36 30 (90)（奇数位乘以 3 就是偶数位）
- 1 5 (8) ($1 + 2^2 = 5$，　$5 + 2^1 = 7$，$7 + 2^0 = 8$)
- D, H, L, (p) （P，等间距）
- 10 14 23 39 64 (100)（间距为完全平方数）
- 10 74 202 394 650（间距递增 64）
- 2 8 5 6 8 (4) 11（应该是 4 吧，两两这么看的，　2、5、8、11，　加 3 得来的。　另外一组应该是减 2，也就是 8、6、4）
- 16 30 46 62 （13+3，　29+1，　43+3，　61+1 然后前面的都是质数，每个质数之间隔了三个质数，　61 之后第四个质数是 79，　79+3=82，或者 16 加上后面的数为第二个的结果）
- 1:4:27:256:? 3125（n^n）
- 2, 5, 26，(677)（规律是当前数字是前一个数字平方加 1）
- ASSERTIVENESS-> SENSSAEVISTRE : MULTINATIONAL -> ?（记录 ASSERTIVENESS 每个字母的位置，再记录下 SENSSAEVISTRE 每个字母的位置，找出 mapping 关系（比如 A 在 ASSERTIVENESS 中第一个位置，在 SENSSAEVISTRE 第六个位置，那么 1->6）。最后记录 MULTINATIONAL 每个字母的顺序，按照之前找出的 mapping 对找出来（如 M 肯定会在所求字符串的第六个位置）。这种题字符串的长度和所包含的字母个数肯定是一样的。）重复字母的情况是有一定规律的，你看 ASSERTIVENESS-> SENSSAEVISTRE , 123456789,10,11,12,13 -> 12,11,10,3,2,1,9,8,7,13,6,5,4 （用重复的字母把字符串隔开，就能看到排列顺序了）【2】ass 【5】ert 【3】ive 【1】nes 【4】s
- 原题字母，这里直接用数字表示：4，5，12，8，9 => 3，4，1，7，8 问 13, 21, 13, 2, 1, 9 => ？（网上解法有：4, 5, 12, 8, 9 => (4 - 1), (5 - 1), (1 - 0)(2 - 1), (8 - 1), (9 - 1)，so13, 21, 13, 2, 1, 9 => 02, 10, 02, 1, 0,8 或者 4 5 12 8 9 -> 3 4 1 7 8 （每位都-1）13 21 13 2 1 9 -> 02 10 02 1 26 8 就是 2 10 2 1 26 8 （B J B A Z H）

Logic

Multiple Choices

If northwest becomes east, northeast becomes south, and so on, what does southeast become?

o   West

- Lily can't find her home, she is 25 yards southwest of her home, then she walked 20 yards toward north, where is her home from her now?

o   15 yards, eastfrom aonecode.com

- Facing north, Rufus walked 15 meters to the left. Then made an about-turn and walked 30 meters. Where is he now?
  - (-15, -30) from the original spot

- Jack walked 4 miles south-east, 8 miles west and then 4 miles northwest. Which direction he stands from the original spot?
  - West

- Facing North, Jack walked 20 miles to the left, 10 miles to the right and then 30 miles to the left. Which direction is he from the original spot?
  - West

- Jack walked 5 yards South, 4 yards West, 7 yards South, 4 yards East and then 5 yards North. Where is he from the original spot?
  - 7 yards. South.from aonecode.com

- 66 people are in a 3-level building. The second level has more people than any of the other levels. It is known that one of the levels has 21 people in it and the second floor has 2 people more than the first floor. Question: How many people is in the second floor.
  - 23 (21, 23, 22)

- A sister is N years younger than her brother. Brother was born 1988. What you can learn from the given information.
  - Age and year of birth of the sister's.

- Which two of the conditions tells the rank of Jack in the class.
  - The two conditions are 1. 38 people are in the class. 2. 19 people rank behind Jack.

- Which conditions tell which day Jack bought the car on.
  - 1. 10/16=<the day < 10/19; 2. 10/17 <the day < 10/20from aonecode.com

- A better sales person would be the one who is able to explain the features of his/her product in a simple manner.

- Would you be able to tell how many balls are on the table knowing that if 7 balls got taken there will be no less than 23 balls left, and if 6 balls got added there will be no more than 20 balls on the table.

  - No

- Candidates for this business traversal are M1, M2, M3, M4, M5 and W1, W2, W3 (5 men and 3 women). The travel demands 3 men and 1 woman. M1 and M3 cannot go on the same trip. M4 and W2 cannot go on the same trip. If it's been decided to send M2, M3 and W2 on this trip, who else you may send with them?

  - M5, W1 or W3

- A - B denotes A plus B. A # B denotes A times B. A/B denotes A greater than or equal to B. A ? B denotes A less than B. Given expression: (V # X) / (V – X), X ? Y and Z/Y, which translates to V*X >= V+X, X < Y and Z >= Y, which of the two following expressions is true?

- X < Z (x < Y <= Z); 2. V + X < V * X

  - 1

应用题

Indian Company

It has been proven by research that in India, a company which purchases saturation radio advertising will get maximum brand recognition.

1. A high degree of brand recognition will help a company win a higher share of the market.

2. Radio has wide listenership and companies intending to increase their awareness, should advertise it. from aonecode.com

3. For maximum brand recognition, a company need not spend on media channels other than radio publicizing. from aonecode.com

4. Brand recognition in India is more heavily dependent on where the brand advertises than the quality of its offering.

Choose 2.

Fridge Sales

Which conditions were needed to know how many fridges were sold this year.

1. The number sold this year is 3 times of that of last year.

2. 40 were sold last year.

Choose Both

环保公司问题

选择是否将候选公司放到一个环保 list 上，条件

1. hava ECC (一种认证)
2. 生成了至少三种 solar 产品
3. none of their products are from synthetic
4. headquater in Texas
5. product 都由 A -certificate
6. donot have legal dispute or pending against them

如果不满足 2,但是有一种产品正在试验中：推荐给 COO

如果不满足 5：推荐给 Director of the company

Company 1: has two products and meets other conditions. Company 2: meets all conditions. Should get invited.

录用 PM

一个公司要招 PM，合理的 candidate 需满足以下条件：

1. 本科是学 CS 的
2. 有 MBA 学位
3. 本科 GPA 3.0+
4. 如果没有 MBA 学位，但是工作 5 年以上，需上报 HR
5. 本科不是学 CS，但是在 CS 相关工作 3 年以上，上报 HR

那么，请问：闰土本科学热水锅炉维修的，GPA 4.0，没有念过 MBA，在 Google 修了 5 年的锅炉，当
了 3 年的程序员，则应该：D

A. 录用
B. 不录用
C. 条件不充分
D. 上报 HR

另一个条件：

1. 候选人必须有硕士学位，且 GPA 为 A
2. 必须有两年以上工作经验，
3. 若 1 不满足报告 director

小明从事某工作三年，有 CS 和 MBA，本科 GPA 为 A-则：报告主管。

又一个条件条件是：

1. Master in commerce and at least B / have CPA
2. 年龄大于 20 ，小于 25
3. 流利的英语和西班牙语.
4. 愿意付 125 刀押金

5. 愿意承诺为公司工作 5 年

- 如果 1 不满足-> refer to M director
- 如果 4 不满足 -> refer to chair man .

快递收费

快递费要不要收的问题。条件是

1. 地区 code 大于 10 一类，小于 10 另一类
2. 商品价格超过 500
3. 不是 deal 的时候买得
4. 之前没有 bulk 超过 5%的折扣. 1point3acres.com/bbs

5. 客户有优良购买记录 3 年

- 如果不满足 2，那么要是他满足地区 code 小于 10，收 10 刀，大于 10，收 8 刀。
- 如果不满足 3，那么 region code 小于 10，收 5 刀，大于 10，收 12 刀

来了一个老头，买了 150 刀的东西，不是 deal 的时候买的，也没有之前折扣。
问他可不可以不付运费。
若不满足两条，则必须付全款。

Jacob is a customer whose sales region code is 14. He had bought goods worth $150 from ABC company in June. He does not have dealership of any other similar company. He has never been provided any bulk discount or special discount.

1. He need not pay any delivery charges

2. He would have to pay $30 as delivery charges

3. has to pay $10

4. has to pay $8

5. data insufficient

Choose 5

Emma is a customer whose sales region code is 08. She has been regularly ordering goods from ABC company for more than 4 years. She has also purchases goods worth $150 in the previous month. She has never been provided with any bulk discount, but has been given a special discount of 2%. However, she has dealership of some other similar company.

1. She need not pay any deliver charges

2. She would have to pay $30 as delivery charges

3. She has to pay $10

4. She has to pay $12.

5. Data insufficient

Choose 2

四人位置

There are four coordinators named Lily, Cathy,Mary and Nina. Each coordinator is at a different corner of the rectangle meeting hall. A coffee vending machine is situated at one of the corners and a restroom at another corner of the meeting hall. Lily and Cathy are at either sides of the white board, which is situated at the center of the side which is opposite to the side at whose corners the coffee vending machine and the restroom are

located. Coordinator Mary is not at the corner where the restroom is located. Which of the following cannot be true?

1. Lily is not on the side of the hall where the white board is placed
2. Nina is adjacent to the restroom at one corner
3. Cathy is at the corner, adjacent to the coffee vending machine.
4. Mary is adjacent to the coffee vending machine, at one corner of the hall
5. Lily is at the corner, adjacent to the coffee machine

选 1？Lily 和 cathy 推出 3,5Mary 这个推出 2,4（注意 23 和 45 的区别）
重点是这句"on either sides of the white board"，俩人分别在 whiteboard 的一侧，而不是要在 hall 的 white board side,我觉得可能性有很多(V 是 vending machine)：

```
_____
|  C                 N(R)|
|  ||                    |
|  ||(W)                 |
|  ||                    |
|  L_____ M(V)|
_____
|  N                 C(R)|
|  |                     |
|  |(W)                  |
|  |                     |
|  L_____ M(V)|
```
等情况

which of the following pairs are at the diagonal corners?

1. Restroom and Nina

2. Nina and lily

3. Mary and coffee vending machine

4. Cathy and lily

5. Nina and Mary

choose 2 or 5

Manufacturer 8 产品

A manufacture company has 8 products and 4 divisions. Four divisions are lead by Alan, Betty, Cathy, Diana. The 8 products are: mixer, iron, water pump, geyser, juicer, blender, grinder, and heater. Each division produces 2 products, no 2 divisions produces the same product. Diana's division produced Geyser, Cathy's division produces water pump. Mixer and iron are produced by division lead by Alan and Betty respectively. The division that produces mixer doesn't produce blender.

Four questions:

1. if the division that produces mixer doesn't produce juicer, which of the following statement is true? (did not catch the statements)

2. if Alan produces mixer and heater, what does Betty produce. (iron)

4. if the division that produces mixer also produces juicer,how many ways are there for product pairs? (3! = 6)

For factory problems, take care of the global assumptions and local assumptions.

Round Table

A round table sits 8 people A, B, C, D, E, F, G, H. F is two seats to the right of C. A and E sit by the sides of G. B and H are right facing each other.

- who is facing D ?

- G

- which two people sit in front of each other? (multiple choices)from aonecode.com

- choose D and G

- who sits next to D ?

- C

- A and B is not adjacent. F is facing A. What is a possible counter clockwise sequence of people sitting at the table.

- AHCDFBEG

Appointing Distributor

Conditions for appointing a distributor, for petroleum gas throughout **Georgia**, are as follows. The applicant should:

1. Be an American by nationality

2. Be in the age group of 21-50 years as on 5th September, 2008

3. Be at least a high school graduate or any other recognized equivalent

4. Be a resident of Georgia. He/she should have stayed in Georgia for not less than 5 years, immediately preceding the date of application

5. Have a family income of not more than $30,000 annually

6. Not have dealership of any oil company

7. Not have any close relative as a dealer/distributor of any oil company

However,

8. Restrictions related to annual income would not be applicable to applicants working in corporations, owned or controlled by state departments. Such a case should be referred to the Managing Director

9. For unemployed applicants who hold at least a bachelor's degree, conditions (6) and (7) may be waived

10. If an applicant is from a rural district but is not a resident of Georgia, the case may be referred to the Chairman

William Trevino, who works in a public corporation owned by a state department, is an American by nationality. He is 23 years of age. He holds a bachelor's degree and has an annual income of $35,000. He has been staying in Georgia for 7 years. Neither he nor any of his relatives works as a distributor or a dealer for any oil company.

1. He should be selected

2. He should not be selected

3. Insufficient data

4. The case should be referred to Managing Director

5. The case should be referred to the Chairman.

Anna, a non-Georgia, American citizen, is a high school graduate with family income of $20,000 per annum. Her date of birth is 15.03.1985. she does not have dealership of any oil company nor does she has any close relative as a dealer or a distributor. She lives in a rural district.

1. She should be selected

2. She should not be selected

3. Insufficient data

4. The case should be referred to Managing Director

5. The case should be referred to the Chairman

OA2 - Work Simulation

时间非常充足，可以慢慢做，就是问你要是你你会怎么选，你同意谁的观点和给一下几个做法打分的题

各个员工讨论 case media network 服务器最近好多 complaints,有德国的，有 invalid recommendation 的，给了个列表好多国家的服务器返回什么 404/ german recommendation/ invalid recom/问是什么原因。还有俩个年轻老白讨论客人要强烈要求有硬皮书的推荐，但服务器里只有 digital 版本的，到底要不要加这个功能，感觉后面的视频是根据你的选择来的（有待考证）；里面有个会议室白人，亚裔，烙印在讨论服务器最近好多 complaints,然后我选则的要看 Intenal test，结果后面会议结束烙印站起来义正言辞跟我说，我已经写了 20 年服务器了，不可能有错误的，而且我刚刚才调试过机器，绝对不可能是内部错误。呵呵，里面有个选项问，烙印 is not helpful...只能呵呵~~ 大部分跟地里说的一样，类似问卷调查，选 deadline 更重要 和用户体验更重要。

第一个情境是给图书馆写图书推荐系统，第一问让两个人继续说，第二问选图书馆的服务器有没有开放关于实体书的 api

后面有会议说系统出现 bug，该做出什么反应，选看 internal bug 记录。

最后是五个 case 看哪个可以通过，前人都提示过，注意 user 的构造函数没有给 email 赋值。

simulation 就是看 email，chat...大家记得每收到 email 就要看看，我当时碰到没有题的 email 直接跳过，后来做题的时候做了几道发现信息很少做不出来随便乱选了，翻了翻记录才发现有些信息都在那些没题的 email 里了。。看 log 得题就找相同错误的规律，我记得有道我选了地点都在德国，有个是因为 username 太长没存全， testcase 就是地里说的那些 email 没有初始化，

找错题有 5 个 unit test 有一个是 user 的 payment method 返回的是 null，一个是 user 的构造函数不包含 email， 一个是 setPrice()传进去的参数是 double,但是 return 是 int。coding： 1 reverse right half linkedlist example: 2->1->3->4->5->6->7->8 变成 2->1->3->4->8->7->6->5 ； 如果总是为奇数，中间的也要变 5->7->8->6->3->4->2 变成 5->7->8->2->4->3->6 很简单就不多说了

Work Simulation 一开始两个码农撕逼，一个要用 old API 可以满足 deadline，一个要独自开发 new API 可以满足 requirements，这道题连续让你选三次，每次的视频都是根据你的选择不同而不同的。。楼主纠结很久后选择站在那个颜值更高的码农一边。。满足 requirements。。那仁题其实是一个小测试：第一个选 deadlline，因为这时没提出用户。后两个全用户优先。。。。写这里给后人参考下。

其他不这么二选一的绝境，只要坚持 deadline 最好不要拖，自己辛苦一点无所谓，多咨询 manager，找其他有经验的人合作啥的，随机应变吧。。

会有让你安排一个项目的计划，因为有很多不同的 feature 可以实现，但是要在 8 个月之内搞定，每个 feature 会有一个预计的占用时间和这个 feature 的重要程度。。只要坚持在占用时间一样的情况，多选牛逼的 feature。。

Log 里德语我选的 proxy，invalid recommendation 是因为 username 太长，database 的那个 field 定义长度短了。。

ShoppingCartClass 两道题三短一长选最长，之前这么选的拿到 video 了。。

5 个 Testcase 选 1， 3， 5 过不了，2， 4 能过。。

显示德语是因为 proxy 推荐错误因为 username 太长的被简化了。时间很充裕完全不用着急

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1. dealline 与 requirement。看着选吧。

2. log 问题。找相同原因就行。我看的 log 是某个 service 出问题了，给了你一个 report。第一问是为什么会出现德语，看 report 发现出现德语的共同点是 locate 都在德国，所以答案选的就是 locate。第二问是为什么有的是 invalid，看 report 发现共同点都是 username 都很长，因此选的 username 很长。

3. test case。关于 shopping 的代码。第一问是某个 method 为什么不行，答案选的 performance issue。这个不太确定（其他几个选项更不合理）。第二问是 how to improve shoppingcart class。我选的是 add user.id to shoppingcart class. 第三问就是 5 个 test case 了。地里前辈说过很多了，应该是 1，3，5 跑不过。第一个是 getdefualtpayment 会返回 null。第三个是 user 并没有初始化 email，所以 getemail 会出错。第 5 个是 setprice 的 method 返回的是 integer，而 testcase set 的是 double 。

model 1 代码出了 bug，有 user 访问不了 webpage 了让你找原因

第一题 你想看哪些资料，选项有 screenshot of error page， log， user id，browser version，user area，按 1-5 排序

第二题 给你看 log，单选问题是啥，看 log 里报的 error 是 unequal of review and rating

model 2 跟 external team 合作搞 feature，两个选择：

feature1 是搞一个第三方服务的新系统，目前只在 social media A 和 B 上做了，想 generalize 要再写。好处是 1.media B 很多年轻用户，增长很快 2. 和 B 合作有钱挣

feature2 解决 crashes external team 和感兴趣，不用和其他 team 协调，做起来快

P1 问你想做哪个 （这里应该选 1 因为最后 VP 跳出来说我们要做 1）

P2 external team 想法和你不一样，说你个 rookie，听老子有经验的，问你怎么办

排序： 1）去您*的吧 2）向大佬低头，你都这么说了我就听吧 3）约个 meeting 我们打一架 4）找个 senior 问问（大师兄救我）5）小组投票（集体背锅预备） 6）找 manager （粑粑有人欺负我）

P3 VP 跳出来了说我们做 feature1，要开发 social media C D E 的版本，但时间很紧怎么办

排序： 1）先干两周再说 2）不做 test 了写完直接上 3）CDE 排排序重要的先写 4）自己找同事求助（师兄们救我）5）加班 6）廿回去，老子只能做 1-2 个 7）找 manager （好像漏了两问，不记得了。。。）

model3 code review 被同事怼了

P1 有个同事说你做的很烂建议重来，忘记过程了总之是和他约 meeting

P2 meeting 的时候听他 bb 了一通直到下班，记了笔记但还有没懂的怎么办

排序 1）照着比较写，能写啥样写啥样 2）WRNG 这么麻烦，老子不写了，还是原来的方法吧 3）大哥再聊两块钱的呗 4）回去自己研究研究，不明白的明天再来问 5）喊路人甲帮忙一起看 6）team meeting 一起学（看啊这就是我不会写的东西，这下你们知道我水平了吧）

model 4 有个 feature 出问题了 manager 让你改，说三天改好， P 说时间很紧今天上线，要不就不 test 了

P1 排序 1）和 PM，manager 三方会谈 2）没有 test 老子绝不放手 3）那就不 test 了反正没多大点事 4）找 senior（大师兄救我）5）要不 PM 和 manager 你俩先打一架？

P2 搞定之后下个周又出了类似问题，这次找个了呆头鹅队友改，这货想不 test 直接上线（脸探草丛是大忌啊喂）

排序： 1）你爱咋咋吧，反正死的不是我 2）找 senior （大师兄有人想不开了）3）找他老板告他刁状 4）建议他找人聊聊（兄弟你要不要冲动啊） 5）停下自己手头的工作帮他写 test（兄弟我来帮你插根眼）6）给他看自己上周做的 error report（老子三分钟前就是这么死的）

P3 呆头鹅果然没听，被对面抓了给你发 message 喊救命

排序： 1）快下班了，溜了溜了 2）你看我早说了（miss 我都报了你还去？）3）给点 detail，到底咋了 4）帮他一起 fix 5）帮他滚回都原来的版本 6）大师兄救我

P4 一通救火终于搞定了，manager 说你给大家讲讲之后别犯这错了

单选 我选的是写个 document 发出去

model 5 要做一个 delivery 的 algorithm，要求是每天每车送件》80，里程《200，在 100 天的数据上 develop，3 天 test

P1 给了两个 algorithm 的结果，一个是送的多但跑的久，另一个跑的少但没送够，让你选哪个好

排序：四个理由，有两个分别支持 1，2 的 based on delivery/mileage，还有几个都是没提到的 feature，什么平均里程少 balabala 的

P2 如果给你更多信息你想要啥

双选：1）城市地图 2）algo 在哪 100 天里的表现 3）明确 delivery 和 mileage 到底哪个更重要 4）司机的表现 5）对之后影响 algo 的因素的预测

下一问就给了 100 天的信息，反推的话应该选 2，3？

P3 给了 develop time 和 test time 的信息，发现 develop time 基本不怎么堵，test 的时候城里很堵，问这下怎么选，希望三天内上线

单选：1）algo1，因为 delivery2）我母鸡 3）algo2，因为 mileage 的波动来自于 traffic （可是我看 algo2 的 mileage 也没问题啊）4）algo2，因为 mileage 5）我全都不要，要不我们搞个新的吧

Module1:

制定 deliver route plan 需要满足 1.enable 80 deliveries per day 2.should not exceed 200 miles

有两个备选方案，第一个每天够了 80 但是 mile 数超了好多，第二个 mile 数没超但送货数量不够

Q1 问你选哪个 五个 statement 按 effective 级别排序

Q2 问你如果可以 request additional info 哪个更重要 （我选了 BC）

A 会影响 efficiency 的 future trends data B mile 数和 delivery 数哪个重要 C 过去 100 天的 data D 城市地图 E 过去 3 天的 performance data

Q3 给了你过去 3 天和 100 天的 traffic data 问你 planA 和 B 哪个好

我真的不知道哪个好啊！！！最后犹豫半天选了第一个 因为送货数量 pattern 比较符合 traffic，也不知道对不对

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Module2:

同组的两个人说你的 code 不错，一个人说不行要重做

Q1 问你怎么办

选项大致就是 A 有人 approve 了所以就按我的来 B 你说不对就按你的来吧 C meeting 决定

应该是选和这个人单独 offline meeting 那个选项 因为接下来就和他讨论了

Q2 讨论到了下班，你还是很 confused, 但记了好多笔记 问你怎么办 排序

A 明天再 full time meeting B 新方法太难了还是用旧的 C 回家过一遍笔记把能写的都写出来 不能写的记下来明天接着 meeting D do as much as you can E 找那两个说你做的不错的同事帮你 F 和这人再 meet 三十分钟（这是要把他累死啊）

Module3:

给你两个要 implement 的 feature

Preliminary Thoughts

Feature 1:

- Allows us to establish a new relationship with 3rd party services
- Requires an Amazon product manager
- System only designed to interact with Social media platform A and B, so needs extensive re-factoring to generalize to other social media platforms
- Social media platform B has a rapidly growing user-base and is largely comprised of a younger demographic
- Interacting with Social Media platform B could generate more revenue for Amazon

Feature 2:

- Introduces crashes to the application when shared on certain devices
- Research shows that there is a correlation between crashing and order abandonment
- External team has aligning interest to implement this option – more on board with Feature 2
- Doesn't require as much coordination across team
- Takes approximately half the time to implement as Feature 1

Q1 选出 4 个 feature1 的优点
Q2 选出 2 个 feature2 的优点
两个都不难 比 gre 阅读简单
Q3 只能 implement 一个 你选哪个 应该是排序 我选了 feature1 应该是对的 因为最后决定做 1 了
Q4 有个 senior engineer 说我们要 implement feature 2 问这时候你怎么做
A 和他还有 high level decision makers 开会 B 坚持做 feature1 因为已经讨论过 pros and cons 了 C 和这人还有 external team 开会 D 全组投票 E 因为他比你有经验所以听他的 F 问 manager
Q5 manager 过来说我们要做 feature1，而且要在 social media C D E 上实现，但是 ddl 很紧张，问你怎么做 排序
A 直接跟 manager 说做不了 需要更多 resource B 因为 ddl 紧张所以不 test 了 C 排序这三个 social media 的重要性 先做重要的 把不重要的留到 ddl 之后 D 先做着 过几周再找 manager 说你做不完了 需要 additional resource（这个不太好吧） E 自己找 team member 寻求帮助 F 直接驳回 建议只 work on 1-2 social medias G 自己 work overtime

Module4:
亚麻的 product page 出问题了，有 customer 无法查看 product info，你 manager 让你解决
Q1 What additional info would be helpful? 排序
A customer region B URL C Screenshot of error page D session ID E Browser versions
Q2 你怎么 fix this bug？ 排序
A search the logs B look at metrics(latency, error counts, # of requests....) C 手动去看 code 然后 debug（好猛） D 分析有可能会 fail 的 request 的 log E 跟 technician 说这是偶然现象 自己会 fix F 只分析 failed request 不看 valid request G 因为太 urgent 了所以立刻去向大佬请教

Q3 给了 log data 让你分析到底哪出错了

这题应该选 unequal number of rate and review

Module5: 这个 module 好好笑

你要 debug 一个东西，manager 跟你说大概需要三天，但 PM 让你今天就交因为他觉得是个小 bug 可以不用 test

Q1 你怎么办 排序

A 跟 senior eng 讨论一下 risk 再决定 B 还是先 test 过后再 release C 跟 PM manager 开会再决定 D 都有理所以重新问问你 manager E 相信 PM 不 test 了

Q2 一周以后你同事也遇到了相同情况，他想 push without test，你怎么办 排序

这道题选项记不太清了 大致就以下几种： A 把你上次情况跟他说，劝他别这样 B 不关我事 C 建议他找 senior eng 讨论下 D 找他 manager 告状（当时看到这个选项笑得停不下来）

Q3 马上下班时候收到同事 msg，他没听你的，直接 push code 了，结果翻车了（哈哈哈哈哈哈哈哈哈）你怎么办 排序

A 早跟你说了你不听 B ask for more info about the issue C 帮助他 revert code change D 帮助他 push 另一个 code 把问题立刻解决（这真的能做到吗。。） E 找 senior eng 求救 F ignore the message and sign off（这个也好好笑）

Q4 manager 给你发邮件说让你 come up with a plan to make sure this doesn't happen again 而且希望你把这个任务 prioritize 你怎么搞 单选

A 跟他说我做完手头的再去做（作死啊） B write up document 详细描述 C set up automations 来预防 D 规定以后每个 code change 都必须有至少一个 peer review E 和 manager，PM 再好好探讨下不 test 的风险（打 PM 脸啊这是）F 让之前翻车的同事跟你一起弄