Amazon Interview Experience | Set 303 (On-Campus)

Difficulty Level :\nEasy

Last Updated :\n28 Jun, 2021

Round 0: (Written): 20 MCQs + 2 Coding Questions

MCQs \xe2\x80\x93 Topics:\xc2\xa0<u>OS</u> ,<u>DS</u> ,<u>DBMS</u> \xe2\x80\x93 (Serialization etc.), <u>Aptitude</u> (simple <u>puzzle</u> kind.)

Coding Questions:

• Given a string output reverse string (string could have multiple spaces between the words). Example:

i/p: I am a proud Indian.

o/p:

Indian proud a am I.

• Given a no in string format output another string which is the biggest no formed from using same digits, otherwise print -1:

```
i/p:\r\n0000\r\n132\r\n4312\r\n11\r\no/p:\r\n0\r\n321\r\n432\r\n-1\r\n
```

So the solution is: http://stackoverflow.com/questions/12493591/given-an-array-of-integers-find-the-largest-number-using-the-digits-of-the-array

DAY 2: (Interview Rounds)

Round 1 (Technical Interview \xe2\x80\x93 45 min approx.)

The Interview started with his introduction, what his department is, what do they do and so on.

- Given a link list of 0\xe2\x80\x99s and 1\xe2\x80\x99s sort it so that all the 0\xe2\x80\x99s are at beginning and 1\xe2\x80\x99s at the end.\xc2\xa0It had to be in-place.
 - You cannot swap values only pointers. Order of 0\xe2\x80\x99s and 1\xe2\x80\x99s was to be maintained . I\xc2\xa0had to write production level code for this with all boundary conditions checked!
- Given an array of 0\xe2\x80\x99s and 1\xe2\x80\x99s again and a variable k, print the size of the smallest window which contains exact k 0\xe2\x80\x99s.
 - discussion about the best optimised approach .
 - I solved it by storing indexes of all 0\xe2\x80\x99s and calculating min diff b/w every k
 elements.

Round 2 (Technical Interview \xe2\x80\x93 1 hr approx.)

The interviewer asked me to introduce myself and then my projects.

- A person has to cross a road and with each step he either gains some energy or loses some (this info is provided as an array). Find out the min amount of energy he should start with so that at any level his energy is not less than 1).
 - Simple question done in O(n).
- How to solve (a*b)%m, where all a,b,m are of the order 10^15. Modulo\xe2\x80\x99s distributive property is one thing.
 - 1st approach suggested was breaking the no\xe2\x80\x99s to binary as solving for eg:- [($2^5 + 2^3 + 2^0$) * (2^5)] % [($2^3 + 2^2 + 2^0$)] is feasible,\xc2\xa0but he wanted faster approach. I suggested O(lg b) approach using divide n conquer (recursive solution) .
- He asked me if I know about the data structure Trie, I had heard about it and its use but never

implemented it. He explained a briefly what it is, then told me to code its structure, its functioning (finding / adding a new word).

Then asked a few questions on it, some cases where it will falter, some more discussion on it.

Thanks Geeks! Result \xe2\x80\x93 Selected \xf0\x9f\x99\x82

If you like GeeksforGeeks and would like to contribute, you can also write an article and mail your article to review-team@geeksforgeeks.org. See your article appearing on the GeeksforGeeks main page and help other Geeks.

Please write comments if you find anything incorrect, or you want to share more information about the topic discussed above

All Practice Problems for Amazon!

My Personal Notes\narrow_drop_up

Add your personal notes her

Save