

Amazon interview Experience | Set 413 (SDET-1 On-Campus Internship)

- Difficulty Level : [Medium](#)
- Last Updated : 12 Jul, 2019

This was a pool campus conducted by amazon for internship.

Online Round: There were 20 mcq(+1 for each) and 2 coding questions(+30 for each). MCQ had more networking and DS problems.

1. Given three linked list, add them. [GeeksforGeeks Link](#)

Input will be of this format

```
1->0->1\r\n8->9->9\r\n5\r\nOutput: 1->0->0->5\r\n
```

Solving above problem in python is easier than C++. I solved it in C++ using deque(30/30 points).

2. [Given an array of size n consisting of positive integers, choose three integers\(not necessarily contiguous\) such that they are in ascending order and their product is maximum.](#) Input was given in this format.

```
\r\narray = {5, 3, 6, 8, 9, 10}\r\nOutput: array = {8, 9, 10}\r\n
```

Many people(including me) ignored the ascending order part and got 20/30 points. Later during interview, interviewer asked me to explain my code and told me the corner case.

Note: Input was given exactly like I said in both problems. It was a bit different from usual problems. You first have to break strings to integers then solve the problem.

Round 2:

1. [Tic-Tac-Toe](#)

This was on paper round. I have heard there is another easier solution using magic square. 8 were selected from this round.

Round 3:

Technical Interview Round 1

The interview started with the most common questions Tell me about yourself and Projects/Internship. Then there were few theory questions like what is binary tree? What is binary search tree? Then 2 coding questions.

1. [Level order traversal](#)
2. [Find next greater number with same set of digits](#)

Instead of digits, it was string of alphabets. There was a bug in my code. Interviewer gave me a test case and asked me to test it. Changed the approach and solved it by sorting. He asked which sorting and why? First I said merge sort because of $n \log n$ complexity. Then I said since range is small(1-26), we can use count sort. He asked if we really need sorting? Then I said

that reversing the second part was sufficient because it was in descending order.

Round 4:

Technical Interview Round 2

Again discussion on \xe2\x80\x9cTell me about yourself\xe2\x80\x9d and \xe2\x80\x9cProjects/Internship\xe2\x80\x9d.

1. [Maximum of all subarrays of size k](#)

He first asked how will you solve this problem. Gave 3 different approaches. Then finally asked to write code for deque approach.

I was asked few more theory questions from DS and DAA. Like what are some algorithmic paradigm? Difference between Greedy and DP? Questions on Dijkstra(Complexity, greedy or dp). And finally I was given a problem based on graph and was asked which algorithmic paradigm will be used to solve it? Answer was backtracking.

Interviewers were friendly. They helped us giving hints wherever we got stuck.

My advice is read past interview experiences from GeeksforGeeks and practice those problems on \xc2\xa0[GeeksforGeeks judge](#). Brush up your CS fundamentals like Data structures, Algorithms, Networking and Database.

Thank you GeeksforGeeks for helping me during my interview preparation. \xf0\x9f\x99\x82

[All Practice Problems for Amazon !](#)

My Personal Notes\narrow_drop_up

Add your personal notes here

Save