Technical Interview:

- You're given a Boolean 2D matrix, can you find the number of islands?
- Given an array of strings, find if the given strings can be chained to form a circle. A string X can be put before another string Y in circle if the last character of X is same as first character of Y.
- Tell us an efficient data structure for minimizing the following operations if we have an array arr[0 . . . n-1].
- Add a value x to array from index l to r where $0 \leq l \leq r \leq n-1$
- Find the value of a specified element of the array arr[i] where $0 \leq i \leq n-1$
- Is {a, n, d} a palindrome? If you are given a random string, is it a palindrome or not?
- Questions on Implementation of AVL tree.

HR Interview:

- Why do you want to be a part of Amazon?
- What makes you better than other candidates here?
- What are your short term & long term career goals?
- Use only 3 words to describe yourself

- Given a linked list, reverse K nodes in it.
- Search for an element in an array which has elements who's values are first increasing and then decreasing. (Use modified binary search)
- Find the second largest element in an array.
- Given a sorted array which can have repeated elements, find the occurrence of an element. (Most optimal solution is O(log n) – Using binary search to find start and end occurrence)
- Make a data structure and implement an algorithm to print all the files in a directory. (The root directory can have sub-directories too.)
- Convert a BST into a DLL and DLL to BST in place.
- Vertical traversal of a Binary Tree.
- Lowest Common ancestor in a Binary Search Tree and Binary Tree.
- Implement a stack with push (), pop() and min() in O(1) time.

HR Interview:

- Why should we hire you?

- Tell us your weaknesses that hinder your work? How will you overcome them if we hire you?

- Are you comfortable with changing cities for the job?