

# DATA STRUCTURE ALGORITHM QUESTIONS

amazon

Just simplified my experience here...

Hope it goona help you all...

Save this pdf and thanks me later

 @himanshu\_shekhar16

 @himanshushekar

# Amazon Interview process

## Online Assessment Round

Online assessment is the process of conducting a test online to gauge the participants' learning and mastery over a particular subject.

3 question have been asked and 75 min allotted.

Difficulty level is Medium

All problems should be done in order to get a call for technical interview rounds

## Data Structures and Algorithms Rounds (3 Rounds)

The candidate is asked DS/Algo problems where production ready code might be expected from the candidate. It is not out of the realm of possibility to face minor behavioural questions here as well. The problems range from easy to hard but they are not the sole deciding factor for the final offer. Leadership principles also come into play here. The interviews are conducted on Amazon Chime.

The main focus of these technical rounds are to check problem solving ability of a candidate.

Be prepared it well

## HR Round (1 Round)

This is when they ask computer science theory and behavioural questions to the candidate. The questions may enquire about the candidate's experience at previous companies and conflicts the candidate might have faced with colleagues/managers.

Should prepare all HR questions

# Previously Asked Questions

## Easy Level

- [Get minimum element from the stack](#)
- [Serialize and deserialize a binary tree](#)
- [Print a binary tree in a vertical order](#)
- [Celebrity problem](#)
- [Level order traversal](#)
- [Swap the kth element from starting and from the end position](#)
- [Binary tree to bst](#)
- [Max sum in the configuration](#)
- [Find the nth element of spiral matrix](#)
- [Count the number of occurrences in a sorted array](#)
- [Find the smallest window in a string containing all characters of another string](#)
- [Find the maximum of all subarrays of size k](#)
- Find the [kth smallest element in row-wise and column-wise sorted matrix](#)
- [Minimum swaps required to arrange pairs](#)

- [There is an array of N numbers ranging from 1 to N. Only 1 number is missing, return the index of that number](#)
- [Find the second largest and second smallest in a given array](#)
- [Find power\(x,y\) without using pow function](#)
- [Count possible decoding sequence](#)

## **Level Medium**

- [Given two string print them inter leaving strings characters](#)
- [Minimum cost required to travel from top left to the bottom right in a matrix](#)
- [Maximum difference between node and its ancestors](#)
- [Min distance between two given nodes of a binary tree](#)
- [Find the number of island](#)
- [Topological Sort](#)
- [Detect cycle in a directed graph](#)
- [Flattening a link list](#)
- [Detect a loop in a linked list](#)
- [Check if a binary tree is BST or not](#)
- [Min Cost path](#)
- [Count ways to reach nth stair](#)
- [Maximum Subarray Problem](#)

- [Palindrome Partitioning](#)
- Given a binary tree [find the minimum root to leaf height.](#)
- [Implement LRU cache](#)

## **Level – Hard**

- [Boolean parenthesis](#)
- [Maximum Index](#)
- [Largest Number formed in the array](#)
- Find the length of maximum numbers of consecutive numbers jumped up in an array
- Delete the elements in a linklist whose sum is equal to zero
- [Given a list of numbers of odd length design an algorithm to remove a number and divide the rest numbers equally so as it makes their sum same](#)
- [Find diameter of a binary tree](#)

# Tips for Amazon Interview Preparation

Now that we know about the rich heritage of Amazon, its work culture, and Leadership Principles, I am sure that you are tempted to interview at Amazon and take a job! Here are a few tips which you can use to crack Amazon's interview and get a job

Understand the Leadership Principles Well –

Be Thorough with Data Structures and Algorithms-

Use the STAR method to format your Response –

Know and Describe your Strengths –

Discuss with your interviewer and keep the conversation going –

Feel Free to connect with me –

<https://www.linkedin.com/in/himanshushekhar16/>