Key Topics: DSA, OOP, DB, Create Schema from given Scenario, Complexity Calculation, SQL related queries, Networking, pointer, array

## Problems from glassdoor.

- 1. What is the difference between stack and queue? [DONE]
- 2. Which language I'm most familiar with? [DONE]
- 3. Tell me about yourself.
- 4. Was this my first interview? [DONE]
- 5. What are the differences between the access modifiers of java? [DONE]

6.

Ka-123-123

Kha-12-312

Ga-123-123

Gha-13-123

If these are the only valid format of number plates for cars, how would you validate a new number plate?

- 7. What data structure do you use for a implementing a social network like facebook? [DONE]
- 8. Difference between tree and graph. [DONE]
- 9. Coding problem: detecting two different given format of telephone numbers. [DONE]
- 10. Convert Digit to Binary [DONE]
- 11. Print a Tree [DONE]++
- 12. Given a valid string signature, how do you check a string is valid or not?
- 13. Given a fixed delimiter, you have to split a string into multiple words.
- 14. How will you make an Elevator system? What are the data structures and functions which will be used?
- 15. "777-870-4566", "7778704566" both are valid us phone numbers. Write a code for validating us numbers. [DONE]
- 16. What are the differences between abstract and interface in java? [DONE]
- 17. You want to implement a Set in Java that can store objects of user-defined classes. How can you achieve that?
- 18. Why you are interested to join therap
- 19. Random integer in range I,r without rand function. [DONE]
- 20. Sum of digit until becoming 1 digit number. [DONE]
- 21. Concat integers to make the largest integer.
- 22. Check which version is latest
- 23. find the height of a binary tree [DONE]
- 24. Bug in a Java code.
- 25. Reverse a linked list [DONE]
- 26. Every integer occurs twice except an integer find that integer [DONE]
- 27. Write a recursive function that prints a string backwards. [DONE]

- 1. Insert in BST
- 2. Reverse a Linked List without using extra linked list
- 3. Reverse a string using recusion
- 4. Delete from a linked list

DB - W3School (Schema Design + Query + Normalization)

Networking - TCP, UDP, OSI Model, TCP/IP Model, DNS, FTP, SMTP, Ipv4, IPv6, SSL etc. from javapoint.com

OS- Thread, Process, CPU Scheduling, Memory Sharing of thread/process, Deadlock (Avoidation, Prevention, Detection (Basics)), Semaphore, Difference between (Multithreading vs Parallel Programming, MultiProcessing) etc from javapoint.net

OOP - Java & C++

DSA - Linked List, Tree (Traversal), BST, Stack, Queue, Array, BFS, DFS, Recursion, Sorting (All), Searching (Binary Search)

- 1. Insert into a sorted linked list
- 2. Reverse a linked list
- 3. Find middle point in a linked list
- 4. Check Pallindrome in a linked list
- 5. Insert, Search into BST
- 6. Given a pattern. Check a string is valid according to the pattern. (Regex is not allowed)

## Example:

Pattern:

756-1234-980

7561234980

These are the valid phone numbers. Write a code to check wether an arbitrary string is a valid phone number.

- 7. Given an array of string. Find a specific string from the array in O(1) Hint: use map/hashing
- 8. Given an array of integer and a number x. Find, by adding which two integers from the array form x.
- 9. Find max value from a Binary Tree.
- 10. Find max value from a BST
- 11. Reverse a string using recursion.
- 12. Find max sum value from a BST

Ka-42-6789

Kha-34-1234

Ga-57-1078 Gha-56-1234

These are the valid licence pate number pattern. Check an arbitrary string is a valid kicence no or not.