Zoho Cheatsheet

Interview cheatsheet to clear the Developer role

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Watch this video to understand the strategy to use this cheatsheet - https://youtu.be/SvwAj2uawUc - Super important to use this sheet properly

Interview rounds - 5 rounds

Most of the candidates have had 5 rounds of interviews, as per their interview experience.

- Assessment round Aptitude, MCQ
- Programming coding
- Programming LLD
- Tech
- Managerial

Assessment

A total 25 questions are being given - 10-15 aptitude and the remaining output-based Aptitude, Output, Test error Check out the video for the topics to cover.

CODING ROUND: Super Important

Checkout the video to understand the strategy

Curious Freaks coding sheet -

https://docs.google.com/spreadsheets/d/1P3RXgZju_2OzZyJaRtu6D3Kx-Eks38X09_zJ8aj2zy8/edit#gid=0 - Start from basic and cover till Sliding window in the sheet before you start the below problems.

https://www.geeksforgeeks.org/explore?page=4&company=Zoho&sortBy=submissions&itm_source=geeksforgeeks&itm_medium=main_header&itm_source=geeksforgeeks&itm_source=geeksforge

- 1. <u>Diamond pattern -> Try to solve few pattern questions</u>
- 2. Given an array of numbers. Print the numbers without duplication.
- 3. Sort the array odd numbers in ascending and even numbers in descending.
- 4. https://www.geeksforgeeks.org/find-number-currency-notes-sum-upto-given-amount/
- 5. https://www.geeksforgeeks.org/program-to-convert-hexadecimal-number-to-binary/

- 6. https://www.geeksforgeeks.org/convert-binary-number-hexadecimal-number/
- 7. Sort the array elements in descending order according to their frequency of occurrence
- 8. Print true if second string is a substring of first string, else print false.
- 9. Find the least prime number that can be added with first array element that makes them divisible by second array elements at respective index
- 10. Prime number print n prime numbers
- 11. Prime factor sort the array based on the minimum factor they have
- 12. TWISTED PRIME NUMBER
- 13. Find the prime number in the given range. (test cases: interval is negative in range)
- 14. Find the extra element and its index
- 15. Move Zeroes to End of Array
- 16. Find Element Appears Once
- 17. https://leetcode.com/problems/single-number-ii/description/
- 18. Transform String
- 19. Missing Number
- 20. STRING MANIPULATIONS
- 21. MATRIX SORTING
- 22. https://www.geeksforgeeks.org/problems/count-possible-triangles-1587115620/1?itm_source=geeksforgeeks&itm medium=article&itm campaign=bottom sticky on article
- 23. Sort the given elements in decending order based on the number of factors of each element
- 24. Find whether the given number is palindrome or not. Don't use arrays or strings
- 25. Reverse the given string keeping the position of special characters intact
- 26. Decode a string recursively encoded as count followed by substring.
- 27. Given an array of integers of size n. Convert the array in such a way that if next valid number is same as current number, double its value and replace the next number with 0.
- 28. Given an array All and a number x, check for pair in All with sum as x.
- 29. Kadane' Algorithm
- 30. Given an input string and a dictionary of words, find out if the input string can be segmented into a space-separated sequence of dictionary words
- 31. Given two Strings s1 and s2, remove all the characters from s1 which is present in s2.
- 32. Find the next greater element for each element in given array.
- 33. Given a number, find the next smallest palindrome.
- 34. Given an array with repeated numbers, Find the top three repeated numbers
- 35. Given two dates, find total number of days between them.
- 36. Let 1 represent 'A', 2 represents 'B', etc. Given a digit sequence, count the number of possible decodings of the given digit sequence.
- 37. Print all possible words from phone digits
- 38. Given two dimensional matrix of integer and print the rectangle can be formed using given indices and also find the sum of the elements in the rectangle
- 39. Given two dates, find total number of days between them.
- 40. Let 1 represent 'A', 2 represents 'B', etc. Given a digit sequence, count the number of possible decodings of the given digit sequence.
- 41. <u>array of numbers were given to find a number which has same sum of numbers in it's either side.</u>
- 42. Adding a digit to all the digits of a number eg digit=4, number = 2875, o/p= 612119
- 43. https://leetcode.com/problems/add-digits/description/
- 44. Form the largest possible number using the array of numbers.
- 45. Lexicographic sorting.
- 46. Given a set of numbers and a digit in each iteration, if the digit exists in any of the numbers, remove its occurrences and ask for the next digit till the list becomes empty.

- 47. Check if a number 'a' is present in another number 'b.
- 48. https://leetcode.com/problems/maximum-product-of-three-numbers/description/
- 49. Numbers whose sum is closest to zero in an array
- 50. Find palindrome word in sentences.
- 51. Pangram Checking
- 52. Given two strings, find the first occurrence of all characters of second string in the first string and print the characters between the least and the highest index
- 53. Matrix Diagonal sum
- 54. Matrix Addition
- 55. Given a timeline of scores, find the individual scores of player 1 and player 2 and Extras W Wide N No Ball . Dot Ball
- 56. Given a range of numbers print the numbers such that they are shuffled
- 57. Insert 0 after consecutive (K times) of 1 is found
- 58. To calculate strength of the password string using some predefined rules given in the question
- 59. Given four points, We have to say whether it is square or rectangle or any other shape
- 60. Given a large number convert it to the base 7.
- 61. Sort parts of an array separately using peak values.
- 62. Given an input array, find the number of occurrences of a particular number without looping (use hashing)
- 63. Given an array of characters print the characters that have 'n' number of occurrences. If a character appears consecutively it is counted as 1 occurrence
- 64. Find the second maximum among the given numbers.
- 65. Given a two dimensional array which consists of only 0's and 1's. Print the matrix without duplication.
- 66. Given an array of positive numbers. Print the numbers which have longest continuous range.
- 67. Given two arrays. Find its union.
- 68. Climbing Stairs
- 69. Group Anagrams
- 70. Given an array of numbers and a number k. Print the maximum possible k digit number which can be formed using given numbers.
- 71. Given an array of numbers and a window of size k. Print the maximum of numbers inside the window for each step as the window moves from the beginning of the array.
- 72. Search a string in a given 2D matrix.
- 73. Find the number of rectangles filled with 1s in a matrix
- 74. Given a string, reverse only vowels in it;
- 75. Write a program to check if the given words are present in matrix given below.
- 76. Given 2 huge numbers as separate digits, store them in array and process them and calculate the sum of 2 numbers and store the result in an array and print the sum.
- 77. Given sorted array check if two numbers sum in it is a given
- 78. Given array find maximum sum of contiguous sub array
- 79. Given unsorted array find all combination of the element for a given sum.
- 80. Given an odd length word which should be printed from the middle of the word.
- 81. Given an IP address validate it based on the given conditions.
- 82. LRU Cache
- 83. Given an array of positive integers. The output should be the number of occurrences of each number.
- 84. Given an array, find the minimum of all the greater numbers for each element in the array.

- 85. Given a N*N binary matrix and the co-ordinate points of start and destination, find the number of possible path between them.
- 86. Find the largest sum contiguous subarray which should not have negative numbers
- 87. Given a string, we have to reverse the string without changing the position of punctuations and spaces.
- 88. Given a 2D grid of characters, you have to search for all the words in a dictionary by moving only along two directions, either right or down. Print the word if it occurs.
- 89. Given a string, change the order of words in the string (last string should come first).
- 90. Find the shortest path from one element to another element in a matrix using right and down moves alone.
- 91. Write a program to rotate an n*n matrix 90,180,270,360 degree.
- 92. Print longest sequence between same character
- 93. Check whether a string is a subsequence of another or not.
- 94. https://leetcode.com/problems/decode-ways/
- 95. https://leetcode.com/problems/most-common-word/
- 96. https://leetcode.com/problems/longest-increasing-subsequence/
- 97. Wildcard Pattern Matching
- 98. There are n items each with a value and weight. A sack is filled with the weights. In other words there is an array with of length n having the values of the items arr[0...n-1] and another array with weight arr[0...n-1].
- 99. https://www.geeksforgeeks.org/number-cells-gueen-can-move-obstacles-chessborad
- 100. https://www.geeksforgeeks.org/word-ladder-length-of-shortest-chain-to-reach-a-targe t-word
- 101. https://www.geeksforgeeks.org/distinct-permutations-string-set-2
- 102. https://www.geeksforgeeks.org/job-sequencing-problem-set-1-greedy-algorithm/
- 103. https://leetcode.com/problems/string-transformation/description/
- 104. https://www.geeksforgeeks.org/number-cells-queen-can-move-obstacles-chessborad/

Technical Round - LLD Oriented

These are standard LLD questions, search on YouTube to find solutions for the questions and do a Google search to find solutions, you can easily find articles or blog posts on the solution.

OOPS concepts

- 1. Parking management system
- 2. Bank management
- 3. Employee management system
- 4. Lift system
- 5. Railway ticket booking application
- 6. TAXI BOOKING SYSTEM
- 7. GAMES(SUDOKO, N-QUEENS, KNIGHTS, SNAKE AND LADDER, Minesweeper, Breakout a.k.a. Arkanoid a.k.a. Brick-Breaker)
- 8. Bus Ticket Booking System
- 9. Elevator
- 10. Flight Reservation system
- 11. Chess tournament
- 12. Mail server
- 13. Invoice Management

14. TOLL PAYMENT PROCESSING

Common LLD Questions to practice https://github.com/kumaransg/LLD
https://www.educative.io/blog/top-10-system-design-interview-questions

Behavioral Interview

https://leetcode.com/discuss/interview-experience/1532708/tips-for-answering-few-tricky-behavioural-interview-questions