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
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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_campaign=practice_header

1. Diamond pattern -> Try to solve few pattern questions
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 A[] and a number x, check for pair in A[] 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. array of numbers were given to find a number which has same sum of numbers in it's either side.
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-queen-can-move-obstacles-chessborad
100. https://www.geeksforgeeks.org/word-ladder-length-of-shortest-chain-to-reach-a-target-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