**Day 1-5:**

**Company Name:**Goldman Sachs

Questions:

1. [Given an array of strings, return all groups of strings that are anagrams.](https://www.google.com/url?q=https://practice.geeksforgeeks.org/problems/print-anagrams-together/1/&sa=D&source=editors&ust=1641047942230000&usg=AOvVaw3wI8trltvStNQxpYmmA2P7)
2. [Overlapping rectangles](https://www.google.com/url?q=https://practice.geeksforgeeks.org/problems/overlapping-rectangles1924/1/&sa=D&source=editors&ust=1641047942230000&usg=AOvVaw1kNQuYemJ0XSK89SqtFHTL)
3. [Count the subarrays having product less than k](https://www.google.com/url?q=https://practice.geeksforgeeks.org/problems/count-the-subarrays-having-product-less-than-k1708/1/&sa=D&source=editors&ust=1641047942231000&usg=AOvVaw1HSW7PYvVtuILDq36p0U3q)
4. [Given a string, Your task is to  complete the function encode that returns the run length encoded string for the given string.](https://www.google.com/url?q=https://practice.geeksforgeeks.org/problems/run-length-encoding/1/&sa=D&source=editors&ust=1641047942231000&usg=AOvVaw2jkXc6ANzaYCcBfXbHhzAx)[eg if the input string is “wwwwaaadexxxxxx”, then the function should return “w4a3d1e1x6″.](https://www.google.com/url?q=https://practice.geeksforgeeks.org/problems/run-length-encoding/1/&sa=D&source=editors&ust=1641047942232000&usg=AOvVaw3CdwyWqvqEKXFqy80dLfre)(Modified version of question named Cute Monkeys)
5. [Program to find Nth Ugly Number.](https://www.google.com/url?q=https://practice.geeksforgeeks.org/problems/ugly-numbers2254/1/&sa=D&source=editors&ust=1641047942232000&usg=AOvVaw1kvwYDredNzrec-1DxeASx)

      6.    [Given two strings](https://www.google.com/url?q=https://leetcode.com/problems/greatest-common-divisor-of-strings/&sa=D&source=editors&ust=1641047942232000&usg=AOvVaw3WMoMAuFXt96IZE2VOlF31)[str1 and str2](https://www.google.com/url?q=https://leetcode.com/problems/greatest-common-divisor-of-strings/&sa=D&source=editors&ust=1641047942233000&usg=AOvVaw1u9czfhFhkhgrsXIxbOtKh)[. We say that str2 divides str1 if it's possible](https://www.google.com/url?q=https://leetcode.com/problems/greatest-common-divisor-of-strings/&sa=D&source=editors&ust=1641047942234000&usg=AOvVaw06KzJMyOvpawQrLEsKfA6S)

[to          concatenate multiple str2 to get](https://www.google.com/url?q=https://leetcode.com/problems/greatest-common-divisor-of-strings/&sa=D&source=editors&ust=1641047942235000&usg=AOvVaw3HvBC6hJrVoY7jZX345EuG)[str1. For example, ab divides](https://www.google.com/url?q=https://leetcode.com/problems/greatest-common-divisor-of-strings/&sa=D&source=editors&ust=1641047942236000&usg=AOvVaw0BVdKWtKtcbyrn_1MeMBaO)[abab.](https://www.google.com/url?q=https://leetcode.com/problems/greatest-common-divisor-of-strings/&sa=D&source=editors&ust=1641047942237000&usg=AOvVaw2a0Ax_DAFG6BtW259ddv79)

[if](https://www.google.com/url?q=https://leetcode.com/problems/greatest-common-divisor-of-strings/&sa=D&source=editors&ust=1641047942237000&usg=AOvVaw2a0Ax_DAFG6BtW259ddv79)[str2 does not divide str1, return -1. Otherwise, return the smallest string](https://www.google.com/url?q=https://leetcode.com/problems/greatest-common-divisor-of-strings/&sa=D&source=editors&ust=1641047942238000&usg=AOvVaw3NuO7UcY_Zb3n0SjrpoAus)

[str3 such that str3 divides both str1 and str2.](https://www.google.com/url?q=https://leetcode.com/problems/greatest-common-divisor-of-strings/&sa=D&source=editors&ust=1641047942239000&usg=AOvVaw010FkK-K-hNCSHaOmkKsX6)

       7. F[ind the kid which gets tha damaged toy](https://www.google.com/url?q=https://www.geeksforgeeks.org/distributing-m-items-circle-size-n-starting-k-th-position/&sa=D&source=editors&ust=1641047942240000&usg=AOvVaw3bTZ6PCex1rFHpIP4gaXTF)

       8. [Total Decoding Messages](https://www.google.com/url?q=https://practice.geeksforgeeks.org/problems/total-decoding-messages1235/1/&sa=D&source=editors&ust=1641047942240000&usg=AOvVaw21DBFBt-X9r0l-ZRkf5K-V)

       9.[Given a pattern containing only I's and D's. I for increasing and D](https://www.google.com/url?q=https://practice.geeksforgeeks.org/problems/number-following-a-pattern3126/1&sa=D&source=editors&ust=1641047942241000&usg=AOvVaw0JrNUdZs3JeJ1LVbcxnuco)

[for decreasing.Devise an algorithm to print the minimum number following](https://www.google.com/url?q=https://practice.geeksforgeeks.org/problems/number-following-a-pattern3126/1&sa=D&source=editors&ust=1641047942241000&usg=AOvVaw0JrNUdZs3JeJ1LVbcxnuco)

[that pattern.](https://www.google.com/url?q=https://practice.geeksforgeeks.org/problems/number-following-a-pattern3126/1&sa=D&source=editors&ust=1641047942241000&usg=AOvVaw0JrNUdZs3JeJ1LVbcxnuco)

     10. Find max 10 numbers in a list having 10M entries.

      11. [Given an unsorted array Arr of size N of positive integers. One number](https://www.google.com/url?q=https://practice.geeksforgeeks.org/problems/find-missing-and-repeating2512/1/&sa=D&source=editors&ust=1641047942242000&usg=AOvVaw0a3AkyPs08ZowzSCmw_dgp)

['A' from     set {1, 2, …N} is missing and one number 'B'](https://www.google.com/url?q=https://practice.geeksforgeeks.org/problems/find-missing-and-repeating2512/1/&sa=D&source=editors&ust=1641047942242000&usg=AOvVaw0a3AkyPs08ZowzSCmw_dgp)

[occurs twice in array. Find these two numbers.](https://www.google.com/url?q=https://practice.geeksforgeeks.org/problems/find-missing-and-repeating2512/1/&sa=D&source=editors&ust=1641047942243000&usg=AOvVaw2YlxgkF8nkWbJp-jBIGN1W)

     12. Find total number of Squares in a N\*N chessboard

    13.[Decode the string](https://www.google.com/url?q=https://practice.geeksforgeeks.org/problems/decode-the-string2444/1&sa=D&source=editors&ust=1641047942243000&usg=AOvVaw1EIZjSKlhJH3DuVZZkFqX4)

    14.[Minimum Size Subarray Sum](https://www.google.com/url?q=https://leetcode.com/problems/minimum-size-subarray-sum/&sa=D&source=editors&ust=1641047942244000&usg=AOvVaw0ft_-9BNGrhXHil0oQ4XyC)

    15.[Array Pair Sum Divisibility Problem](https://www.google.com/url?q=https://practice.geeksforgeeks.org/problems/array-pair-sum-divisibility-problem3257/1&sa=D&source=editors&ust=1641047942244000&usg=AOvVaw2oLgaApEaSYLnvhtiyX1yv)