**Benchmark IT solutions report.**

**Aptitude**

**Coding**

Problem Statement

1. You are given an array arr1 and array arr2 of size n and m in sorted order. Each array may have some elements in common with the other array Find the maximum num of a path any array to the end of any of the two arrays. We can switch from one array to another array only at the common elements path from the beginning of

Note: The array arr1 and arr2 contains the unique elements.

The function max\_sum() accepts the parameters array of integers arr1 and arr2 with the size n and m. Complete the function max, sum() and return the max path in the integer format.

1. You are given an array art and array air2 of size and is respectively You have to find the union of the two array and find the size of the new array.
2. You are given three arrays arr1, arm2, and arr3 of size n1,n2 and n3 sorted in increasing order Find all the elements which are common in three array the array formed must be sorted and doesn’t contain duplicate elements. If no common elements are found return -1.

The function find\_Intersection() accepts the parameters array of integers arr1, arr2, arr3 with their size n1, n2 and n3 Complete the function find\_intersection() and returns the common\_elements array sorted in ascending order.

1. You are given an array arr of size n and an integer k. You need to find the number of pairs in the array whose sum equals k. The arr[]+arr[]==k;where []=k

The function count\_pair() accepts the parameters array of integer arr with the size n and an integer k. Complete the function count\_pair() and return the count of the pairs counter in the integer format.

1. You are given an array arr of size n and an integer k. You need to find the subarray whose sum equals k and return the starting index and the ending index of the subarray when it is present in the original array. In case of multiple subarrays, always consider the subarray which comes first on moving from left to right. The two indexes in the array should be according to 1-based indexing if the subarray does not exist then return [-1-1].

The function find\_subarray() accepts the parameters array of integer arr with the size n and an integer k. Complete the function find subarray() and return the pair subarray\_sum having the starting and ending index in an integer array format.

1. You are given with an array arr1 and arr2 with size n and m resp. You have to find whether the arr2 is subset of arr1 or not. If yes return 1 else 0. The array may be sorted or unsorted. The function isSubset() acceots the parameters arr of integers arr1 and arr2 with the size n and m complete the function isSubset() and return the check\_subset whether arr2 is subset or not in the integer format.
2. Your given an array of size n consisting of +ve value where each value represents the no. of chocolates in the packet. Each packet can have variable number of chocolates. Your also given an integer, denoting the number of students. Your task is to distribute chocolate packets among k students such that
   * + 1. Each students gets exactly one packet
       2. The difference between maximum number of chocolates given to students and max. number of chocolates given to students and min number of chocolates given to students is minimum

The function find\_min\_difference() accepts the paramenters arr of an integer arr with size n and integer k. complete the function find\_min\_difference() returns the chocolate\_distribution in long long format

**Technical**

1. Project related : questions – industrial uses, technologies, algorithms, which algorithm is suitable, and how do you find which algorithm is best.
2. Python OOPs
3. Scenarios -> How do you explain Machine learning to your family as they are not aware of it.
4. Associations rule
5. Supervised and Unsupervised
6. Earlier Machine Learning was not there so what they use to do
7. How does Chat GPT work in background
8. Application of AI and ML in real life
9. C++, java => OOP concept
10. How do you use AI in Banking
11. LLM
12. In detail about internship
13. Chat GPT applications
14. Sorting Questions
15. Questions according to your resume

(There main focus was the projects and your knowledge about that specific domain . Your concepts should be very very clear)

**HR**

1. Projects
2. Hobbies – in details
3. How you see yourself after 5 years
4. Are you flexible for another technology (i.e Node.js)
5. Family Background
6. Have you appeared for companies earlier and why were you rejected by them
7. What does your Instagram bio mean
8. Your overall background
9. How quick will you learn any other technology other from your domain.
10. Mostly to know your nature and full casual talk

**Feed Back from Company.**

1. Students are weak in English
2. Students should know the basics
3. Students should be flexible in Coding languages
4. Should know about trending technologies and should adapt things