# O ANUSANDE DE LINE

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# (DEEMED TO BE UNIVERSITY) Accredited by NAAC of UGC with 'A' Grade

## **Coding Questions for Interview**

- Q1. Write a java program to search an element in a given array of size n. If search is successful then delete the corresponding index element.
- Q2. Write a java program to input n single digit number from 0-9 and form a largest whole number out of the inputted n single digit number.
- Q3. Write a java program to find the largest factor of n which is a factorial number.
- Q4. Write a java program to count frequency of unique character present in a given string.
- Q5. Write a java program to find all pair of elements from an array whose sum is equal to a given number.
- Q6. Write a java program to find first repeating element in an array of integers.
- Q7. Write a java program to find kth smallest element from a given array of size n.
- Q8. Write a java program to search an element from given array of size n using Binary Search.
- Q9. Write a java program to count frequency of each element of a given array of size n.
- Q10. Write a java program to find the Kth smallest divisor of a natural number N.

You are given a number N and number K.

Examples:

Input: N=12, K=5

Output: 6

The divisors of 12 after sorting are 1, 2, 3, 4, 6 and 12.

where the value of 5<sup>th</sup> divisor is equal to 6.

Input: N=16, K=2

Output: 2

#### Q11. Write a java program to find smallest permutation of given number.

Given a long integer r, return the smallest(magnitude) integer permutation of that

number.

Example:

Input: 5468001

Output: 1004568

Input: 5341

Output: 1345

Q12. Consider the below series:

```
1, 2, 1, 3, 2, 5, 3, 7, 5, 11, 8, 13, 13, 17, ...
```

This series is a mixture of 2 series – all the odd terms in this series form a Fibonacci series and all the even terms are the prime numbers in ascending order.

Write a program to find the Nth term in this series.

### Q13. Count number of ways to divide a number in 4 parts

Given a positive integer n, write a java program to find number of ways to divide n in four parts or represent n as sum of four positive integers. Here n varies from 0 to 5000.

```
Examples:
Input: n = 5
Output: 1
There is only one way (1, 1, 1, 2)
Input: n = 6
Output: 2
There are two ways (1, 1, 1, 3) and (1, 1, 2, 2)
Input: n = 8
Output: 5
There are five ways (2, 2, 2, 2), (1, 1, 1, 5), (1, 1, 3, 3), (1, 1, 2, 4) and (1, 2, 2, 3)
```

Q14. Write a program to find intersection of two sorted arrays in Java.

#### Example:

if the two sorted arrays as input are {21, 34, 41, 22, 35} and {61, 34, 45, 21, 11}, it should return an intersection array with numbers {34, 21}, For the sake of this problem you can assume that numbers in each integer array are unique.

Q15. Write a java program to print the following pattern.

```
1
121
12321
1234321
123454321
1234321
12321
121
1
```