**COGNIZANT INTERVIEW QUESTIONS**

1. Find all the prime numbers within the given range.
2. Given an integer array nums , print an array answer such that answer[i] is equal to product of all the elements of nums except nums[i].

Input:

4

1 2 3 4

Output:

24 12 8 6

1. Given two integers, find the hamming distance between two integers. Hamming distance between two integers is the number of bits that are different at the same position in both numbers.

Input:

3 14

Output:

3

1. Given an integer array nums and an integer K , return the Kth largest element in the array that is the Kth largest element in the sorted array not the Kth distinct element.

Input:

3 2 1 5 6 4

2

Output:

5

Here, K = 2. The second largest number is 5.

1. Given two strings S1 and S2 , find if first string is a subsequence of second.

Input:

AXY

ADXCPY

Output:

True

1. Given an array ‘ARR’ containing ‘N’ integers’. The task is to find the sum of the minimum value in ‘SUB’, where ‘SUB’ ranges over every contiguous subarray of ‘ARR’.

Input:

4

1 2 3 4

Output:

20

Test case 1:

Subarrays with ‘1’ as their minimum value: [1], [1,2], [1,2,3], [1,2,3,4]. Sum = 1 + 1 + 1 + 1 = 4.

Subarrays with ‘2’ as their minimum value: [2], [2,3], [2,3,4]. Sum = 2 + 2 + 2 = 6.

Subarrays with ‘3’ as their minimum value: [3], [3,4]. Sum = 3 + 3 = 6. Subarrays with ‘4’ as their minimum value: [4]. Sum = 4.

The sum over all subarrays is ‘4 + 6 + 6 + 4 = 20’.

Thus, you should return ‘20’ as the answer.

1. Given an input integer ‘N’, print the following binary pattern for it.

Input:

4

Output:

1111

000

11

0

1. Find all the factors of the given number. . If the entered input is zero then the output should be “No Factors”. And if the entered input is a negative number then first convert it to positive and then find its factors.
2. Given a time in 12-hour AM/PM format, convert it to military (24-hour) time. Don’t use inbuilt functions.
3. Given an integer array, Remove duplicate elements and print the result.

Input:

1 2 2 4 4 5 6 7 7

Output:

1 2 4 5 6 7

1. Find the sum of numbers without using arithmetic operators.
2. Find the LCM of three numbers.