Zoho interview questions

Round 2

1. Remove duplicates from the given string. For characters, keep the first occurrence, and for numbers, keep the last occurrence.

Do not use additional variables to store the values.

Input: a1b2c34c3b2cb3a1d

Output: abc4231d

2. Count the sum of frequency

Input: 1 1 2 3 4

Output:

1 -> 9 [2+3+4]

 $2 \rightarrow 2[1+1]$ [2,3,4 occurs once. 1 occurs twice]

Input: 1 3 2 4 1 3 5 4 4

Output:

1 -> 7

2-> 8

3-> 12

3. Find the matching regex pattern

Input: xxxaabbccxyz

a+b*c+

Output: aabbcc

4. You are given two version strings, v1 and v2, representing software versions. Each version consists of numbers separated by dots. Print 1 if version 1 is greater than version 2, if both versions are equal, -1 if version 1 is smaller than version 2.

Input:

$$v1 = "1.01"$$

$$v2 = "1.001"$$

Output: 0

Input:

$$v1 = "1.01"$$

$$v2 = "1.0.1"$$

Output: 1

 $v1 \rightarrow [1, 1, 0]$ (missing part treated as 0)

 $v2 \rightarrow [1, 0, 1]$ At the third segment, 0 < 1, so version 1 is greater.

5. Given an array of numbers, rearrange the elements in a wave-like pattern such that:

For every pair of neighbouring numbers, the first number is greater than the second, the next is smaller than the following, and so on.

Input: 1,2,3,4,5,6,7,9

Output: 9,1,7,2,6,3,5,4

Input: 10,20,30,40,50,60

Output: 60,10,50,20,40,30