Question 1:

      In an array of random numbers move all the zero's to the end of the array. For example, if the given arrays is {1, 9, 8, 4, 0, 0, 2, 7, 0, 6, 0}, it should be changed to {1, 9, 8, 4, 2, 7, 6, 0, 0, 0, 0}.
Condition : Avoid Nested Loops
      Test Cases:
      Input : arr[] = {1, 2, 0, 4, 3, 0, 5, 0}
      Output : arr[] = {1, 2, 4, 3, 5, 0, 0, 0}

      Input : arr[] = {1, 2, 0, 0, 0, 3, 6}
      Output : arr[] = {1, 2, 3, 6, 0, 0, 0}

      Input : arr[] = {11, 22, 0, 45, 35, 0, 56, 0}
Output : arr[] = {12, 22, 45, 35, 56, 0, 0, 0}

Question 2:

The program must accept a character matrix of size RXC containing only lower case alphabets as the input. The program must print the count of rows in the matrix where the alphabets are sorted in lexicographical order as the output.

Test Case 1:
Input:
5 4
a s d f
h i j k
z x y q
r s t u
u t x k

Output:
2

Test Case 2:

Input:

3 3

i j o

a z b

p c e

Output:

1

Test Case 3:

Input:

5 4

a c l z

k n q y

c f o t

m p u w

k l o p

Output:

5

Question 3:

The program must accept N integers as the input. The program must remove the first occurrence of 0 in each integer among N integers. Then the program must print the sum

of the N modified integers as the output.

Test Case 1:
Input:
3
100 320 10020

Output:
1062

Test Case 2:
Input:
4
87
157
10
13

Output:
258

Test Case 3:
Input:
2
1010
3201

Output:
431

Question 4:

The program must accept a time T in 24-hr format(HH:MM:SS) and three integers X,Y,Z as the input. The integer X represents the number of hours to be added to the time T. The integer Y represents the number of minutes to be added to the time T.The integer Z represents the number of seconds to be added to the time T. After each adjustment of the time (add X hours, add Y minutes and add Z seconds), the program must print the revised time as the output.
Note : No Limit for Hours (ie "102:46:53" is valid in/out)

Test Case 1:
Input:
10:05:45
4 65 100

Output:
14:05:45
15:10:45
15:12:25

Test Case 2:
Input:
03:00:00
7 88 9999

Output:
10:00:00
11:28:00
14:14:39

Test Case 3:

Input:

15:59:59

2 88 12345

Output:

17:59:59

19:27:59

22:53:44

Question 5:

The program must accept an integer matrix of size RxC and an integer X as the input. The program must print all sub matrices of size 2x2 containing the integer X at least once.

Test case 1:

Input:

5 3

5 8 6

8 8 2

2 9 9

8 3 5

6 5 7

6

Output:

8 6

8 2

8 3

6 5

Test Case 2:

Input:

4 4

10 20 30 40

45 78 56 89

12 56 23 10

48 98 26 55

56

Output:

20 30

78 56

30 40

56 89

45 78

12 56

78 56

56 23

56 89

23 10

12 56
48 98

56 23
98 26

Test Case 3:
Input:
4 3
1 2 3
4 5 6
7 8 9
1 2 3
8

Output:
4 5
7 8

5 6
8 9

7 8
1 2

8 9
2 3