Coding Round:

Firstly there was a coding test for 1.5hrs on Mettl Platform which comprised of 6 sections:

<u>1st Section:</u> 4-5 mcq's related to coding. Eg.- find error in line of code and give output of the above Code

<u>2nd,3rd and 4th Section</u>: Each section comprised of a coding question which was easy-medium level And the topics involved were greedy.

1st question: The Card Game

One day, Fred and his N friends were playing a card game in which each player throws a card with a number written on it. The cards are such that a number X is written on front of the card, and the negative of that number is written on the back side of the card. This game has the following rules: -

Each of the N players is asked to throw a card. After all the N cards are thrown, Fred has to flip one or more cards in consecutive order, only once.

Your task is to help Fred flip the cards in such a way that the sum of the numbers, on the front face of the cards, is the maximum.

Input Specification:

input1: An integer N denoting the number of cards ($1 \le N \le 500$)

input2: An integer array containing N integers, where the ith integer denotes the value on the front of the card $(-1000 \le input2[i] \le 1000)$

Output Specification: Return the maximum sum of the numbers, on the front of the cards

(Verdict: Passed all test cases except one corner case.)

2nd question: Count The Visible Clothes

I don't have the exact question but i can explain the question in short.

There were various intervals given in the form of {start,end} and let's say we represent these intervals On a number line. When viewed from the front view, find the total number of intervals which will be visible.

Input: N=10

[{0,4},{6,9},{1,6},{6,10},{7,9}]

Output: Total number of clothes visible when seen from front is 4.

(Verdict: Passed all test cases except one corner case.)

3rd question:

A neighborhood of Park Street is raided by soldiers in search of Agent Y. They land on different buildings on a helicopter. The rooftops of these buildings are connected to each other through ladders. Each soldier can take control of the buildings in a straight line (left-right and forward-backward), with respect to the building/position they have been dropped at. They cannot take control of buildings diagonally.

There are 8 buildings in each row and column. Your goal is to determine and return the total number of buildings that are controlled by these groups of soldiers.

Note: A soldier also controls the building on which he/she is currently positioned/ dropped.

Input Specification:

input1: An integer value representing the number of soldiers that have landed

input2: A 2-D array of size input1*2 representing 'x' and 'y' coordinate positions of the soldiers starting from (1,1)

Output: Return Total number of buildings controlled by a group of soldiers.

Example1:

input1: 2

input2: ((5,5),(5,3))

Output: 22

Explanation:

When two soldiers are dropped at positions (5,5) and (5,3) then the total number of buildings controlled by soldiers is 22. No. of buildings in column 3 + No. of buildings in column 5 + No. of buildings common among them = 8 + 8 + 8 - 2 = 22 Therefore, 22 is returned as the output.

Example 2:

input1: 1

input2: ((4,4))

Output: 15

(Verdict: Passed all test cases.)

5th and 6th Section: Also had some mcq's