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LeetCode Virtual Contest - 262

Problem No: 2 (Medium level)

⇒ Minimum operations to make a Uni-Value Grid.

⇒ Uni-value grid means no. of operations to make the grid with all same value. or if not possible return (-1).

2	4
6	8

grid, x = 2

Here given we do two operation

+x -x

// My initial step when I read problem I start from grid[0][0] and see first value is equal to x, then move on // grid[0][1] = 4

So → I thought store mat in vector and do operation one by one.

2 4 6 8

in this no operation

here I check I will -x one so get -2

here I check -x twice get 2

there =3 times

So its not minimize the operation

⇒ Again I read the problem and get a logic like I take only two cases value 2, 4

[2|4], x=2

2%2 =0, 4%2 =0 { If I did mod of given arr and got 0 (zero) then we can convert the matrix or array in minimum no. of operation }

So its logic for checking, and satisfied also.

Now I took another edge case: [1|2|3|4], x=2

1%2 != 0, 2%2 =0, 3%2 != 0, 4%2 =0

So here we can't convert it in unique val so return (-1).

Now ⇒ going through given que. in that I did the same like every grid[i][j] %x

Now ⇒ for min operation I thought:

① we put all elem. of grid in vec and sort the array
② Using concept of median if there is odd no. of size of array then their is 1 median so for odd → med = size of arr/2;
and then calculate how many operation need to perform to make all element = median.

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So for that ⇒ dif abs(arr[i] - median) / x

take example:

1	3	5	7	9	x = 2
+2	+2	↓	-2	-2	
= 3		median	= 7		
+2			-2		
(5)	(5)	(5)	(5)		

So now 9 to 5 how many operation needed that is

$= \frac{9-5}{x} = \frac{4}{2} = (2)$

now 1 to 5

abs(1-5) ÷ x

4 ÷ 2 = (2)

So total no. of operation = 2+2

= 4 //.