

## LeetCode Virtual Contest - 262

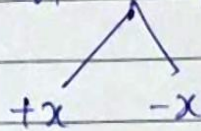
### Problem No: 2 (Medium level)

- ⇒ 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).

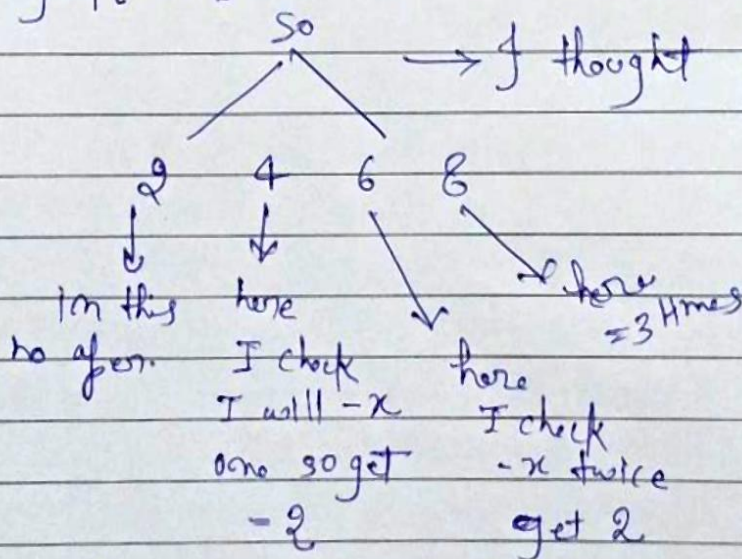
2	4
6	8

grid,  $x = 2$

Here given we do two operation



// 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`



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

so it's not minimize the operation



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

$\boxed{2} \mid \boxed{4}$ ,  $x=2$   
 $\downarrow \quad \downarrow$   
 $2 \times 2 \quad 4 \times 2$   
 $= 0 \quad = 0$

{ 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:  $\boxed{1} \mid \boxed{2} \mid \boxed{3} \mid \boxed{4}$ ,  $x=2$

$\downarrow \quad \downarrow \quad \downarrow \quad \downarrow$   
 $1 \times 2 \quad 2 \times 2 \quad 3 \times 2 \quad 4 \times 2$   
 $= 0 \quad = 0 \quad = 0 \quad = 0$

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  $[i][j] \times x$

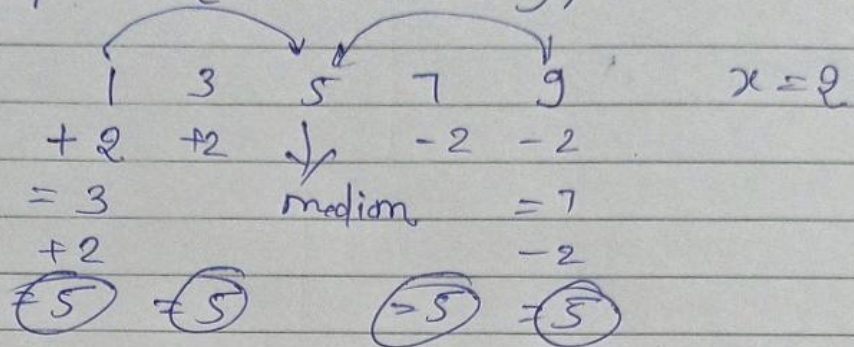
Now ⇒ for min operation I thought:

- 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 there is 2 median so for odd  $\rightarrow \text{med} = \text{size of arr} / 2$ ; and then calculate how many operation need to perform to make all element = median.



for that  $\Rightarrow$  did  $\text{abs}(\text{confli} - \text{median}) / x$

take example:



So how g to 5 how many operation needed that is

$$= \frac{g-5}{2} = \frac{4}{2} = 2$$

now 1 to 5

$$\text{abs}(1-s) \div x$$

$$4 \div 2 = 2$$

So total no. of operation =  $2+2$   
= 4 //