CF-535 -Div 3 __/__/____

(A) Take a as l1

if l1 is not equal l2 take b as l2

else take b as r2 as l2 & r2 are unequal (given in (Q))

(B) Obviously the greatest no is one of x & y.

Let greatest no. be x

$\boxed{\text{If}}$ → If the second greatest no. is a divisor of ~~greatest~~ x

then if it only exists once, it can't be y as

it has to exist twice →

→ Once as a divisor of x

→ Once as ~~a~~ ~~itself~~ divisor of itself

(Else) If the second greatest no. is not a divisor of x then

it is surely y.

So y is →

1) either a divisor of x & twice in the list

Or 2) not a divisor

We find the largest no. which fulfills ~~either~~

one of these conditions.

__/__/____

(C) There can be $3 \times 2 \times 1 = 6$ possible combinations of BRG.

Now one of these has to repeat to create a pattern where same color lamps are at a distance of 3 from each other.

For each 1 of these 6 patters to repeat we find the number of changes in the current garland & output their minimum.

(D) ~~A~~ Let the char arry be x

if ~~x(i)~~ $x(i) = x(i+1) = x(i+2)$
then it is best to ~~x(i)~~ $x(i+1)$ as it will only cost one operation.

However, if $x(i) = x(i+1)$ then we should change $x(i)$ as we don't know about $x(i+2)$ and $x(i+1)$'s change could have an effect on it while $x(i)$ will not.

So we change $x(i)$ to the colour except $x(i)$ & $x(i-1)$

__/__/____

E1) If we would include both maximum & minimum in a range decreasing them both would have no effect on their difference.

Decreasing the maximum anyway does not make sense.

So for each element i we assume it to be maximum & execute the ranges that do not include it.
Then we find the minimum element after these operations.
The maximum being a[i]

We find the maximum difference & save the ranges taken for that element & that will be our answer.