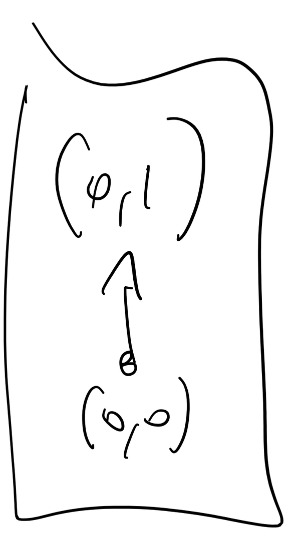
R-630

Saturday, 30 January 2021 14:24



1..m colors $m \le 11$

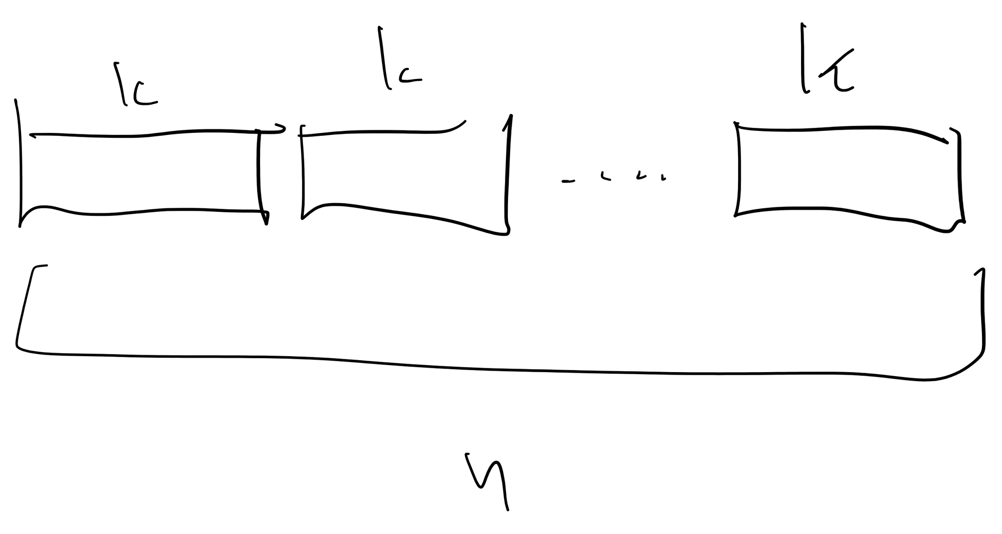
// first primes

$\boxed{x}$ $\boxed{y}$

c_1 c_2

$c_1 = c_2 \Rightarrow$

$\gcd(c_1, c_2) > 1$



aba|aba|ba

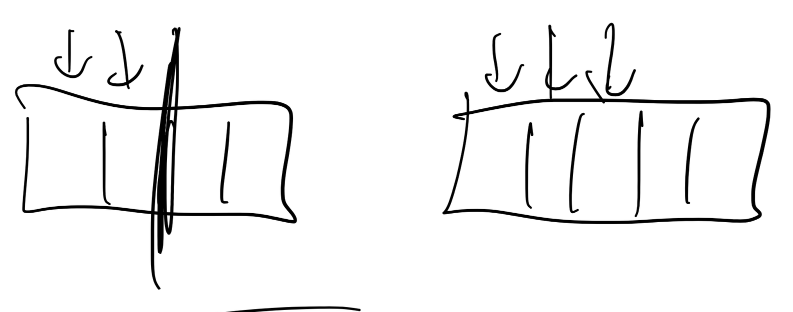
k=5

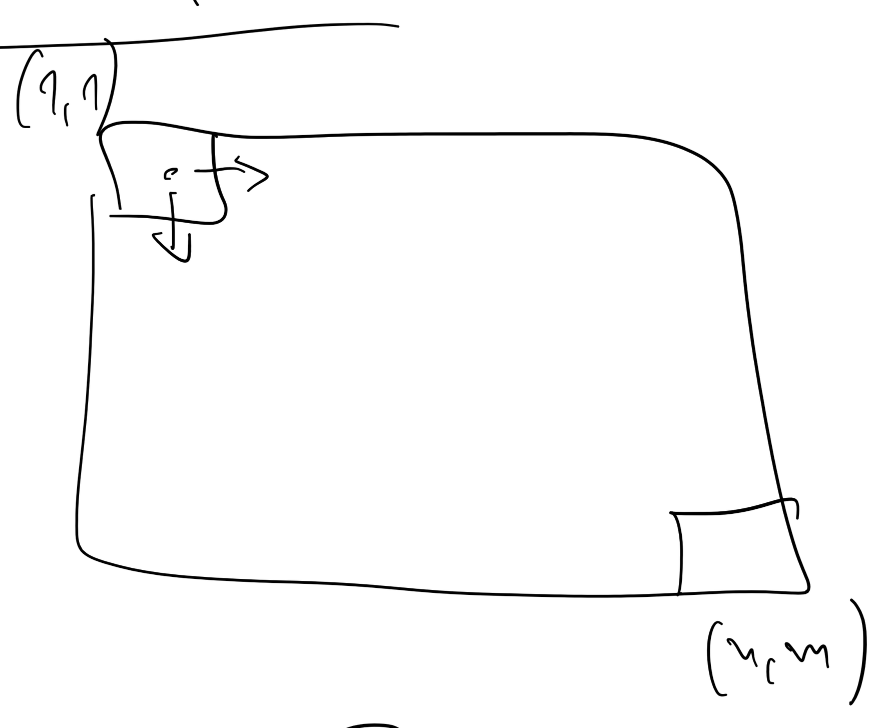
01 2

abe|aba

- all segments equal
- all palindromes

a b a a b a





_ 2 _

7 3 3 1

4 8 3 6

7 7 7 3

111 — 011 — 011 001

100 1000 011 110

111 111 111 — $\boxed{011}$

⇓ Bob

111 011 011 001

100 000 011 010

100 100 100 $\boxed{010}$

max k:

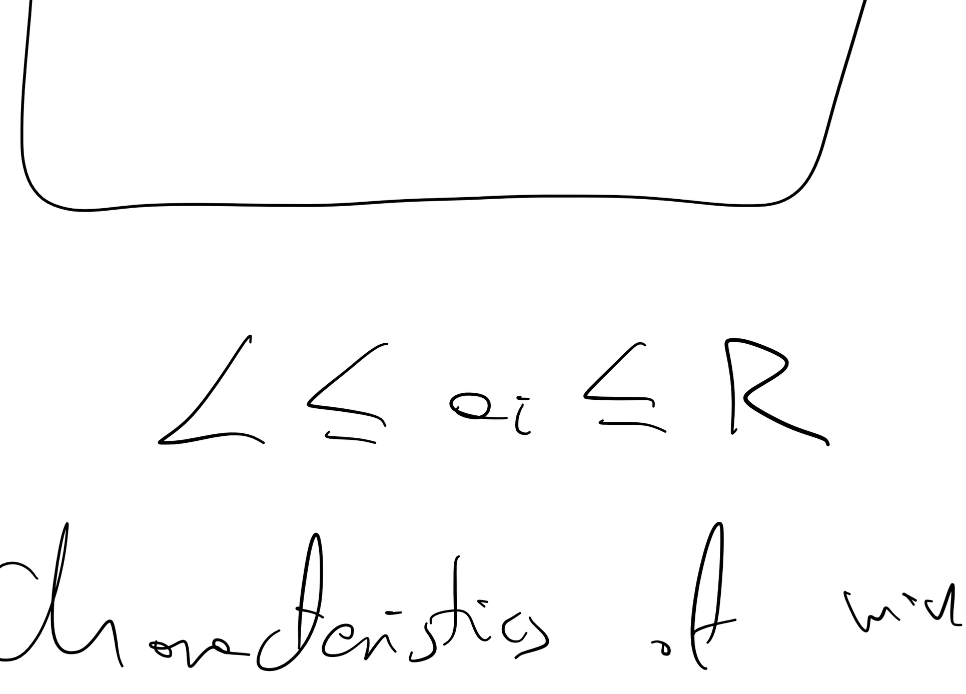
1....k 1...k 1....

1...k k 1...k

1.... 1....k k 0

solution: k

Bob:



$L \le a_i \le R$

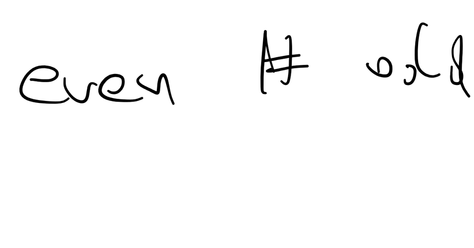
Characteristics of winning board?

We can change parity of arbitrary even number of cells.

So:

n*m is odd - always winning!

else:



even # odd/even elements

$n*m \% 2 == 1 \rightarrow (R-L+1)^{n*m}$

no : # odd elements in [L,R]

ne : # even elements in [L,R]