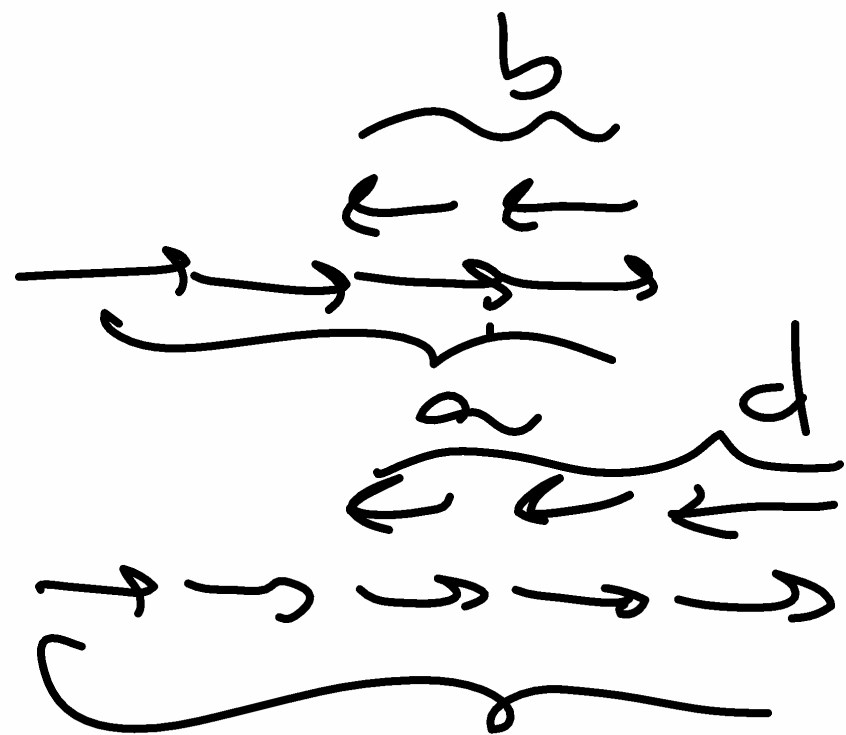


Nicky:



Byron:

t	N	B
1	1	1
2	2	2
3	3	3
4	4	4

t	N	B
5	3	5
6	2	1
7	3	3
⋮		

After n time steps

who wins?

(assuming $a_1 > b_1$)

a
b
a
b
a
b

t	a	b
1	1	1
2	if $a > b$;	1
	else	1
3	if $a > 2$;	1
	else	

let's try to "simulate" Nikky running

Input a, b, s
 $d = 0$

$f = a$ "# forward steps left"

$r = b$ "# backwards " "

let's run if $s \geq 0$

if $f \neq 0$: so 1 step forward,
& $s > 0$

$d \rightarrow d + 1$

repeat

$f \rightarrow f - 1$
 $s \rightarrow s - 1$

if $r \neq 0$: so

$d \rightarrow d - 1$

$r \rightarrow r - 1$ // $s \rightarrow s - 1$

repeat

"next for"
 $f = a$
 $r = b$
Go to REPEAT