

$\{1, a\} \{b\} \{c\} \{1+a\} \{1+b\} \{1+c\} \{1+1\} \{a+1\} \{a+b\} \{a+c\}$   
 $\{b+1\} \{b+a\} \{b+b\} \{b+c\} \{c+1\} \{c+a\} \{c+b\} \{c+c\}$

$a = 1$

$\{1, a\} \{b\} \{c\} \{1+1, 1+a, a+1, a+a\} \{1+b, a+b\} \{1+c, a+c\} \{b+1, b+a\} \{b+b\} \{b+c\}$   
 $\{c+1, c+a\} \{c+b\} \{c+c\}$

$b = 1+a$

$\{1, a\} \{b, 1+1, 1+a, a+1, a+a\} \{c\} \{1+b, a+b\} \{1+c, a+c\} \{b+1, b+a\} \{b+b\} \{b+c\}$   
 $\{c+1, c+a\} \{c+b\} \{c+c\}$

$c = a+a$

$\{1, a\} \{b, c, 1+1, 1+a, a+1, a+a\} \{1+b, a+b\} \{1+c, a+c\} \{b+1, b+a\} \{b+b\} \{b+c\}$   
 $\{c+1, c+a\} \{c+b\} \{c+c\}$

$c = 1$

input(c)

$\{1, a, c\}$   
 $\{b, 1+1, 1+a, 1+c, a+1, a+a, a+c, c+1, c+a, c+c\}$   
 $\{1+b, a+b, c+b\} \{b+1, b+a, b+c\} \{b+b\}$

$\{1, a\} \{b, 1+1, 1+a, a+1, a+a\} \{c\} \{1+b, a+b\} \{1+c, a+c\} \{b+1, b+a\}$   
 $\{b+b\} \{b+c\} \{c+1, c+a\} \{c+b\} \{c+c\}$

$\{1, a\} \{b, 1+1, 1+a, a+1, a+a\} \{c\} \{1+b, a+b\} \{1+c, a+c\} \{b+1, b+a\} \{b+b\}$   
 $\{b+c\} \{c+1, c+a\} \{c+b\} \{c+c\}$

input(b)

$\{1, a\} \{b\} \{1+a, 1+1, a+1, a+a\} \{c\} \{1+b, a+b\} \{1+c, a+c\} \{b+1, b+a\}$   
 $\{b+b\} \{b+c\} \{c+1, c+a\} \{c+b\} \{c+c\}$

$c = 1+1$

$\{1, a\} \{b\} \{c, 1+a, 1+1, a+1, a+a\} \{1+b, a+b\} \{1+c, a+c\} \{b+1, b+a\}$   
 $\{b+b\} \{b+c\} \{c+1, c+a\} \{c+b\} \{c+c\}$

$\{1, a\} \{b\} \{c, 1+a, 1+1, a+1, a+a\} \{1+b, a+b\} \{1+c, a+c\} \{b+1, b+a\}$   
 $\{b+b\} \{b+c\} \{c+1, c+a\} \{c+b\} \{c+c\}$

$c = a+1$

$\{1, a\} \{b\} \{c, 1+a, 1+1, a+1, a+a\} \{1+b, a+b\} \{1+c, a+c\} \{b+1, b+a\} \{b+b\}$   
 $\{b+c\} \{c+1, c+a\} \{c+b\} \{c+c\}$

$a = 1$

$\{1, a\} \{b\} \{c, 1+a, 1+1, a+1, a+a\} \{1+b, a+b\} \{1+c, a+c\} \{b+1, b+a\}$   
 $\{b+b\} \{b+c\} \{c+1, c+a\} \{c+b\} \{c+c\}$