color PHILS = with m1 | m2 |...| mk

color SERVANT = with ser

color cookie_disp = Integers

color cola_disp = Integers

var x: PHILS

var s: SERVANT

var y, z: cookie_disp

var u, v: cola_disp

fun refill_cookie z = M

fun no_cookie z = M

fun refill_cola v = N

fun no_cola v = M

priority {refill_cookie, refill_cola} > {cookie, cola}