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}