Cov: co Cliente

Monitar. Wants-enteldirections
monitar. Leaves-tunnel [direction].

CWS\_north: Int 13#(scho gendshacinel norte en el timel e CWS\_South: Int 23 # (x hes yends hacin el sur en el timel e Someone\_north: Condition

HINV: CWS\_north 20 1 cars\_south 20 1

1 (7 (Cars\_north 20 1 cars\_south 20)) +

def wants-eat(direction):

someone = South. Wait ( cars - South == 0)

HINV A cars - south == 0+

cors - north := cars - north + 1

+ INVH

else: 13 (direction:: South)

someone\_north.wait (cors\_north ==0)

\$INVA (cors\_north == 0)

(cors\_south:= cors\_south + n

\$INVY

+INV}

INVA Cos. south == 0 ( ) ( urs. north zo A (os. south == 0) 1/1/10 5. north >0 1 (os. south>) () (as. north = 0) ( of )

=> Curs noth 21 1 (ws - south == 0 = ) Los primeos dos té minos de la conjunción se siguen trivialment que l'el citimo porque consosula : o. fos noth: Cob nothin =) Case noth >0 1 cas south==0 => INVV . INV 1 (WS\_north==0 2=) (WS\_north==01 (WS\_south=0=) =) (ws-nx46==0 1 (ws-south ≥1 =) cat-south: - (as-south+1 ( ) pro (an Carl not neces) =) (ws-north=0 1 (ws-south >0 => INV/ des le aus-tinnell d'rection! FINVALICUS\_north>01 (US-south==01 direction== NORTH)A

(Floors-south>01 cus-north==01 direction== South) if direction == NORTH? IINV 1 Cars-north > 0 1 ras-south = of (WS-Noth: CWS-Noth-1 someone-noth. Signa(1) else: Widirection = = South) HINV A CWS\_South DO Acces-undh = = of (WS-south := (WS-south - 1 some ore-south. Signall) TINIT

· INU 1 (WS_ nx 14>0 1 (WS_ south ==0 Z=>
K=) cars north >0 x Cars south >01/11 (us noth)01
Cws-south>01) 1 (ws nuth>0 1 cws south=== 0 2-1
5:00
C-) (as no (h) 1 (us - 5, ut 4 = = 0 = 5
(-) (as no (h >0 1 (us. 5) ut 4 = =0 = 5)  (is north:= (us. north)
-5 Cws-nxth+1 >0 1 Cws-south==0 (3)
Col Cos noth 20 1 Cors south == 0 = 5 INV
Aralossal Molassal Molassal
· INV 1 Cus-sorthoo 1 Cus-noth==0 (=)
L-s (ws_south > ) 1 (ars_nxth = : 0 2)  (ass_south;= cass_south;= cass_south;=
Cars-South; = Cass South
=> CWS-South +1>01 CWS-North ==02-1
Col Cus-north=01 (us_sorth=00 =SINV
(a) per con-manh = >0