$$(x < 1) == ($$

	a	b		OR
	1	1		1
	1	0		1
	0	1		1
	0	0		0

	a	b		AND
	1	1		1
	1	0		0
	0	1		0
	0	0		0

$$t_1 = 1$$

if $t_1 \; != \; 0$ goto t_{rue}

if $t_2 \; != \; 0$ goto t_{rue}

$t := 0$

goto end

$t_{rue} : \; t := 1$

end :

B

A_1 $t_1 = x$

A_2 $t_2 = y$

if $t_1 < t_2$ goto true

$t = 0$

goto end

true: $t = 1$

end:

while   head: B

if $t_b = 0$ goto end

S

goto head

end:

S

A

$x := t_a$

while

.b   assg   A

A₃ $t_4 = x$

A₄ $t_5 = 1$

$t_3 = t_4 + t_5$

while   x   <   y   do   x   :=   x   +   1

```
# B
t1 := x
t2 := y
if t1 < t2 goto true
tb = 0
goto end2
tb = 1
end2:
# back in the while loop
if tb = 0 goto end
# S from the assign
# A comes from the plus
t4 := x
t5 := 1
t3 := t4 + t5
# back in the assign
x := t3
# back in the while
goto head
end:
```