```
_test_shortcircuit multi4
           il
                t0 <- Input
        call
 0:
 1:
        assign p <- t0
 2:
        call
                t1 <- Input
 3:
        assign q <- t1
        call t2 <- Input
 4:
        assign r < - t2
 5:
        call t3 <- Input
 6:
 7:
        assign s <- t3
 8:
                p = 0 goto 9
        if
 9:
        goto
10:
    9:
11:
                q = 0 goto 8
        if
        goto
12:
13:
    8:
14:
        if
                r = 0 goto 5 if true
    7:
15:
                s = 0 goto 5 if true
16:
        if
17:
                6 if false
        goto
18:
    5_if_true:
19:
        param
                0 <- 1
20:
                Output
        call
        goto
21:
      if false:
22:
    6
23:
24:
        if
                p = 0 goto 16
                14
        goto
25:
26:
    16:
27:
        if
                q = 0 goto 15
                14
28:
        goto
29:
    15:
30:
                r = 0 goto 13 if false
        if
31:
    14:
32:
                s = 0 goto 13 if false
        if
33:
                11
        goto
34:
    13_if_false:
        param 0 <- 1
35:
               Output
36:
        call
37:
    11:
38:
                p = 0 goto 23
        if
                21
39:
        goto
40:
    23:
41:
        if
                q = 0 goto 22
42:
                21
        goto
43: 22:
44:
        if
                r = 0 goto 20 if false
45: 21:
46:
               s = 0 goto 20 if false
        if
47:
                0 <- 1
        param
48:
        call
                Output
49:
                18
        goto
50:
    20
       _if_false:
51:
    18:
52:
        if
                p = 0 goto 30
                28
53:
        goto
54:
    30:
55:
        if
                q = 0 goto 29
56:
                28
        goto
57:
    29:
58:
                r = 0 goto 26 if true
        if
59:
    28:
                s = 0 goto 26_if_true
60:
        if
                27_if_false
61:
        goto
    26_if_true:
62:
                25
63:
        goto
64:
    27_if_false:
        param
                0 <- 1
65:
66:
        call
                Output
67:
    25:
```