

State 1

```
s = undef
x = X, y = Y
pc= X != 0
p0:2, p1:0
```

p1: s = y

State 2

```
s = Y
x = X, y = Y
pc= X != 0
p0:2, p1:1
```

State 0

```
s = undef
x = X, y = Y
pc= true
p0:0, p1:0
```

p0: exit

p1: s = y

State 3

```
s = Y
x = X, y = Y
pc= true
p0:0, p1:1
```

p0: exit

p0: enter

p0: enter

State 4

```
s = undef
x = X, y = Y
pc= X == 0
p0:1, p1:0
```

p1: s = y

p0: s = x

State 6

```
s = Y
x = X, y = Y
pc= X == 0
p0:1, p1:1
```

p0: s = x

State 8

```
s = X
x = X, y = Y
pc= X == 0
p0:2, p1:1
```

State 5

```
s = X
x = X, y = Y
pc= X == 0
p0:2, p1:0
```

p1: s = y

State 7

```
s = Y
x = X, y = Y
pc= X == 0
p0:2, p1:1
```