```
module P1
  (nat ?i1,?i2,o1,o2)
{
  nat x;
  loop {
    o1 = i1 + i2;
    x  = i1;
    l1: pause;
    o1 = o2 + i1 + x;
    o2 = i2;
    x  = 2;
    l2: pause;
    if(i1 > 4)
      o1 = i1;
    o2 = i1 + o1;
    l3: pause;
  }
}
```

Steps		1	2	3	4	5
Inputs	i1	1	2	3	4	5
	i2	2	4	6	8	0
Labels	st	T	F	F	F	F
	l1	F	T	F	F	T
	l2	F	F	T	F	F
	l3	F	F	F	T	F
Locals & Outputs	x	1	2	2	4	2
	o1	3	8	8	12	7
	o2	0	4	11	11	0

(a) P1 Source Code   (b) Sample Execution Trace