

```

input : caller : Proc, s : Inst
output:
1 switch TypeOf (s) do
2   case COPY [p = q]
3     if inFlows[q] = ∅ then
4       | outFlows[p] ← inFlows[q] ∪ {s};
5     end
6   endsw
7   case LOAD [p = *q]
8     foreach a ∈ pt[s](q) do
9       | if inFlows[a] = ∅ then
10        | | outFlows[p] ← inFlows[p] ∪ {s}
11        end
12      end
13    endsw
14   case SOURCE [call f unc(a0, a1, ..., an)]
15     foreach k ∈ {0, 1, ..., n} do
16       | if t ai nt(k) then
17         | | outFlows[ak] ← inFlows[ak] ∪ {s}
18         end
19       end
20    endsw
21   case CALL [call f unc(a0, a1, ..., an)]
22     if caller = f unc then
23       foreach ak, k ∈ {0, 1, ..., n} do
24         | fk ← f or mal (f unc, ak)
25         | if ak ∈ P then
26           | | foreach b ∈ pt[s](ak) do
27             | | | inFlows[fk] ← inFlows[fk] ∪ inFlows[b]
28             | | end
29           | end
30         | else if ak ∈ A then
31           | | tk ← t opl evel (ak)
32           | | foreach b ∈ pt[s](tk) do
33             | | | inFlows[fk] ← inFlows[fk] ∪ inFlows[b]
34             | | end
35           | end
36         end
37       Fl ow(caller, f unc)
38     end
39   endsw
40   case ADDR OF [p = &a]
41   case STORE [*p = q]
42   case SI NK[call f unc]
43   endsw
44 endsw

```

Algorithm 2: Flow