

```

var i, y, dat, root, val;
01: if (PID == root) {
02:   i = 0;
03:   dat = new [NPROCS];
04:   dat[root] = val;
05:   while (i < NPROCS) {
06:     if (i != root) {
07:       recv val from any y;
08:       dat[y] = val;
09:     }
10:     i = i + 1;
11:   }
12: } else
13:   send val to root;

```

```

14: if (PID == 0)
15:   send 0 to 1;
16: else {
17:   if (PID == 1)
18:     recv val from 0;
19: }

```

Some code
follows "gather"

suppose root = 1

p0: at 15
p1: at 07
p2: at 13

p0 send 0 to 1

p0: at 19
p1: at 07
p2: at 13

p1 recv 0 from 0

p0: at 15
p1: at 08
p2: at 13