

```
monitor Semaphore {
    int s = 0; ## s >= 0
    cond pos; # signaled when s > 0
    procedure Psem() {
        while (s == 0) wait(pos);
        s = s-1;
    }
    procedure Vsem() {
        s = s+1;
        signal(pos);
    }
}
```

**Figure 5.2** Monitor implementation of a semaphore.

Copyright © 2000 by Addison Wesley Longman, Inc.