int nr = 0;  # number of active readers
sem rw = 1;  # lock for reader/writer exclusion

process Reader[i = 1 to M] {
    while (true) {
        \[ nr = nr+1;
        if (nr == 1) P(rw);  # if first, get lock
    \]
    read the database;
    \[ nr = nr-1;
    if (nr == 0) V(rw);  # if last, release lock
    \]
}

process Writer[j = 1 to N] {
    while (true) {
        \[ ...
        P(rw);
        write the database;
        V(rw);
        \]
}

Figure 4.9  Outline of readers and writers solution.

Copyright © 2000 by Addison Wesley Longman, Inc.