**1.**

|  |
| --- |
| do  {      write\_count++; *// change this*      wait(rw\_mutex);  ...  */\* writing is done here \*/*  ...      write\_count--; *// change this*      signal(rw\_mutex);  }while(true);  do  {      wait(mutex);      if(write\_count == 1) *// chanage this*      exit(); *//change*      read\_count++;      if(read\_count == 1)      wait(rw\_mutex);      signal(mutex);      ...  */\* reading is done here \*/*      ...      wait(mutex);      read\_count--;      if (read\_count == 0)      signal(rw\_mutex);      signal(mutex);  }while(true); |

**2.**

Atomic operations are usable in the kernel. The Unix kernel provides the atomic\_t type to make this possible. Another example is using lock files. When one editor is working on a file, it generates a lock file. This prevents other form editing it.