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.