<u>Using Semaphore to Provide Mutual Exclusion</u> (<u>Mutex</u>) <u>Solution</u>

- 1. Identify all the shared resources in your program;
- 2. Identify all critical sections pertaining to shared variables;
- 3. Create a semaphore for each shared resource;
- 4. Initialize each semaphore to 1;
- 5. Put a *wait*(*semaphore*) right before entering the critical section related to the semaphore, a *signal*(*semaphore*) right after exiting the critical section.