All answers are to be typed. This is **NOT** a programming assignment, no compiler needed, which also means it is due at class time.

A binary semaphore may only have values 0 or 1. Two operations `Waitb` and `Signalb` are defined on a binary semaphore variable `sb` as follows:

`Waitb(sb)` is same as the `Wait` operation of general semaphores discussed in class.

```
Signalb(sb) {
    sb = 1;
    if one or more processes are sleeping on sb, wake one of them up.
}
```

Write a program using binary semaphores to solve the producer consumer problem.