**Exercise:** Sleeping barber - an exercise in thread rendezvous

Solve the sleeping barber problem using only a mutex and semaphores.

a)

The barber shaves customers as long any is present in the barbershop. If no customer is around in the shop, he falls asleep in the barber chair. If a customer arrives, he first awakens the barber then goes to sleep in a barber chair and gets shaved. Use a mutex-protected global variable number_of_customers to keep track of the number of customers in the barbershop and some semaphores used for sleeping (waiting).

b)

In the original problem the customers did not enter the shop, if it was full of customers. Implement this.