

## Barbershop

Pseudo-code:

```
Barbershop:
    mutex m;
    condition customer_waiting, haircut, barber_seat_occupied;
    int remaining_seats = 4;

    barber: {
        while(true){
            // No waiting customer.
            while (remaining_seats >= 4){
                customer_waiting.wait();
            }

            // Barber is ready to give haircut.
            haircut.signal();

            // Barber is doing haircut.
            barber_seat_occupied.wait();
        }
    }

    customer: {
        // Fullshop.
        if (remaining_seats == 0)
            return;

        // Sitting in chair and wait.
        remaining_seats--;
        customer_waiting.signal();
        haircut.wait();

        // Moved to barber's chair.
        remaining_seats++;

        // Do haircut for 1.2s.
        do(1200);

        // Haircut is done.
        barber_seat_occupied.signal();
    }
}
```