

```
1 #define CHAIRS 5
2 semaphore customers = 0;
3 semaphore bber = ?;
4 semaphore mutex = 1;
5 int waiting = 0;
6
7 void barber(void)
8 {
9     while (TRUE) {
10         wait(&customers);
11         cutHair();
12     }
13 }
```

```
1 void customer(void)
2 {
3     if (waiting == CHAIRS)
4         goHome();
5     else {
6         wait(&mutex);
7         waiting++;
8         signal(&mutex);
9         signal(&customers);
10        wait(&bber);
11        getHairCut();
12        signal(&bber);
13        wait(&mutex);
14        waiting--;
15        signal(&mutex);
16    }
17 }
```