

## Solution2

```
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 }
```