```c
#define CHAIRS 5
semaphore customers = 0; // any customers or not?
semaphore bber = 0;      // barber is busy
semaphore mutex = 1;
int waiting = 0;         // queueing customers
```

```c
void barber(void)
{
  while (TRUE) {
    wait(&customers);
    wait(&mutex);
        waiting--;
    signal(&mutex);
    cutHair();
    signal(&bber);
  }
}
```

```c
void customer(void)
{
  if(waiting == CHAIRS)
    goHome();
  else {
    wait(&mutex);
    waiting++;
    signal(&mutex);
    signal(&customers);
    wait(&bber);
    getHairCut();
  }
}
```