

SINCRONIZAÇÃO

Barbeiro (c/ monitores)

```
Monitor Barbearia ;  
int Waiting = 0 ;  
int sleeping = 0 ;
```

```
thr_barber ( )
```

```
{  
  while(true) {  
    Monitor.Enter ( Barbearia ) ;  
    sleeping = 0 ;  
    while ( Waiting == 0 ) {  
      sleeping = 1 ;  
      Monitor.Wait ( Barbearia ) ;  
    }  
    if ( sleeping ) sleeping = 0 ;  
    Waiting - - ;  
    Monitor.Signal ( Barbearia ) ;  
    Monitor.Exit ( Barbearia ) ;  
    cut_hair ( ) ;  
  }  
}
```

```
thr_customer ( )
```

```
{  
  Monitor.Enter ( Barbearia ) ;  
  if ( Waiting < CHAIRS ) {  
    Waiting + + ;  
    if ( sleeping ) Monitor.Signal ( Barbearia ) ;  
    Monitor.Wait ( Barbearia ) ;  
    Monitor.Exit ( Barbearia ) ;  
    get_haircut ( )  
  } else {  
    Monitor.Exit ( Barbearia ) ;  
  }  
}
```