

```

sema pemb = 1
sema music = 5
sema food = 0

```

lock 1

```

condvar pembCV
condvar musicCV
condvar foodCV

```

```

int pemb = 1
int music = 5
int food = 0

```

```

chef()
<cook>
food → up()

```

chef()

```

1 → acquire()
<cook>
food++
foodCV → signal()
1 → release()

```

party()

```

music → down()
pemb → down()
food → down()
<party>
music → up()
pemb → up()

```

party()

```

1 → acquire()
while (music ≤ 0)
    musicCV → wait()
music--
while (pemb ≤ 0)
    pembCV → wait()
pemb--
while (food ≤ 0)
    foodCV → wait()
food--
<party>
music++
musicCV → signal()
pemb++
pembCV → signal()
1 → release()

```