

```

type readbook = MONITOR {
    semaphore s;
    int s_count, i ,seatCount;
    char name[100];
    seatCount = 0; //已被占用的座位数
    InterfaceModule IM;
    DEFINE enterroom (), leaveroom();
    USE enter(), leave(), wait(), signal();

```

```

void enterroom(char[] readername){
    enter(IM);
    if (seatCount >= 100)
        wait(s, s_count, IM);
    seatCount++;
    for (int i = 0; i < 100; i++){
        if (name[i] == null){
            name[i] = readername;
            break;
        }
    }
    {获得座位i};
    leave(IM);
}

```

```

void leaveroom(char[] readername){
    enter(IM);
    seatCount--;
    for (int i = 0; i < 100; i++){
        if (name[i] == readername){
            name[i] = null;
            break;
        }
    }
    signal(s, s_count, IM);
    leave(IM);
}

```

```

cobegin
    process readeri(){
        readbook.enterroom(readername);
        {阅读};
        readbook.leaveroom(readername);
        {离开阅览室};
    }
coend

```