```
struct {
  char name[10];
  int number:
} A[100];
for (int i = 0; i < 100; i++){
 A[i].number = i; A[i].name = null;
}
semaphore mutex, seat;
mutex = 1; seat = 100;
cobegin
Process readeri(char readername[]){
  P(seat);
  P(mutex);
    for (int i = 0; i < 100; i++){
      if (A[i].name == null){
        A[i].name = readername;
        {读者得到座位i};
        break;
      }
  V(mutex):
  {进入阅览室,座位号i,坐下读书};
  P(mutex);
    A[i].name = null;
  V(mutex);
  V(seat);
  {离开阅览室};
coend
```