```
Int count A = 0;
Int count B = 0;
Semaphore MutexA, MutexB, mutex;
MutexA.value=1;
MutexB.value=1;
mutex.value=1;
cobegin
process A_direction_cross_bridge_person
{
    P(MutexA);
    If(count A==0)
        P(mutex);
        Count A = count A+1;
        V(MutexA);
        P(MutexA);
            Count A = \text{count } A-1;
        If (count A==0)
           V(mutex);
        V(MutexA);
}
process B_direction_cross_bridge_person
```

```
{
    P(MutexB);
    If(count B==0)
        P(mutex);
        Count B = count B+1;
        V(MutexB);
        P(MutexB);
        Count B = count B-1;
        If (count B==0)
             V(mutex);
        V(MtexA);
}
coend
```