

第三次作业

徐正

2023/6/23-07

公平过独木桥

int western = 0, eastern = 0;

semaphore mwc = 1, mec = 1, mutexA, mutexB;

```
void west() {  
    while(1) {  
        P(mutexA);  
        P(mwc);  
        westcount++;  
        if (westcount == 1)  
            P(mutexB);  
        V(mwc);  
        V(mutexA);  
        过桥  
        P(mwc);  
        western++;  
        if (western == 0)  
            V(mutexB);  
        V(mwc);  
    }  
}
```

```
void east() {  
    while(1) {  
        P(mutexA);  
        P(mec);  
        eastcount++;  
        if (eastcount == 1)  
            P(mutexB);  
        V(mec);  
        V(mutexA);  
        过桥  
        P(mec);  
        eastcount--;  
        if (eastcount == 0)  
            V(mutexB);  
        V(mec);  
    }  
}
```