

Yilin Yang

Lab 6

```
void enter_bridge()
{
    ok_to_cross.wait();
}
```

```
void exit_bridge()
{
    ok_to_cross.signal();
}
```

Deadlocking can be circumvented by preventing more than one farmer from crossing the bridge at a time. To implement this requires the usage of locks. A lock can be placed in the `enter_bridge` function prior to calling `ok_to_cross.wait`. This will block other farmers from crossing since the procedure is locked. The lock can be released in the `exit_bridge` function after `ok_to_cross.signal()`, alerting the farmer has finished crossing and the bridge is vacant.

```
sem_t sem;

void enter_bridge()
{
    sem_wait(&sem);
    ok_to_cross.wait();
}

void exit_bridge()
{
    ok_to_cross.signal();
    sem_post(&post);
}
```