

CNRS 109 3-14-11

11

-
- Evals Today 6:30-6:45
 - Final: Thur 3-17-11
730-1030 pm
Bring ID
 - Review session: Jared
Tue 3-15-11
800-945 pm
Thuman 1
 - ass 5: 10 pm Tue (no later!)

3 Versions of Producer Consumer.java

2

- Monitor Sync.
- Semaphore Sync.
- java.util.concurrent contains many classes that handle Sync. Automatically, like ArrayBlockingQueue



classic Deadlock

```

class A { // shared object
    :
    foo() { ..... bar(); ..... }
    :
    bar( A a ) { .. do something with a .. }
    :
}

```

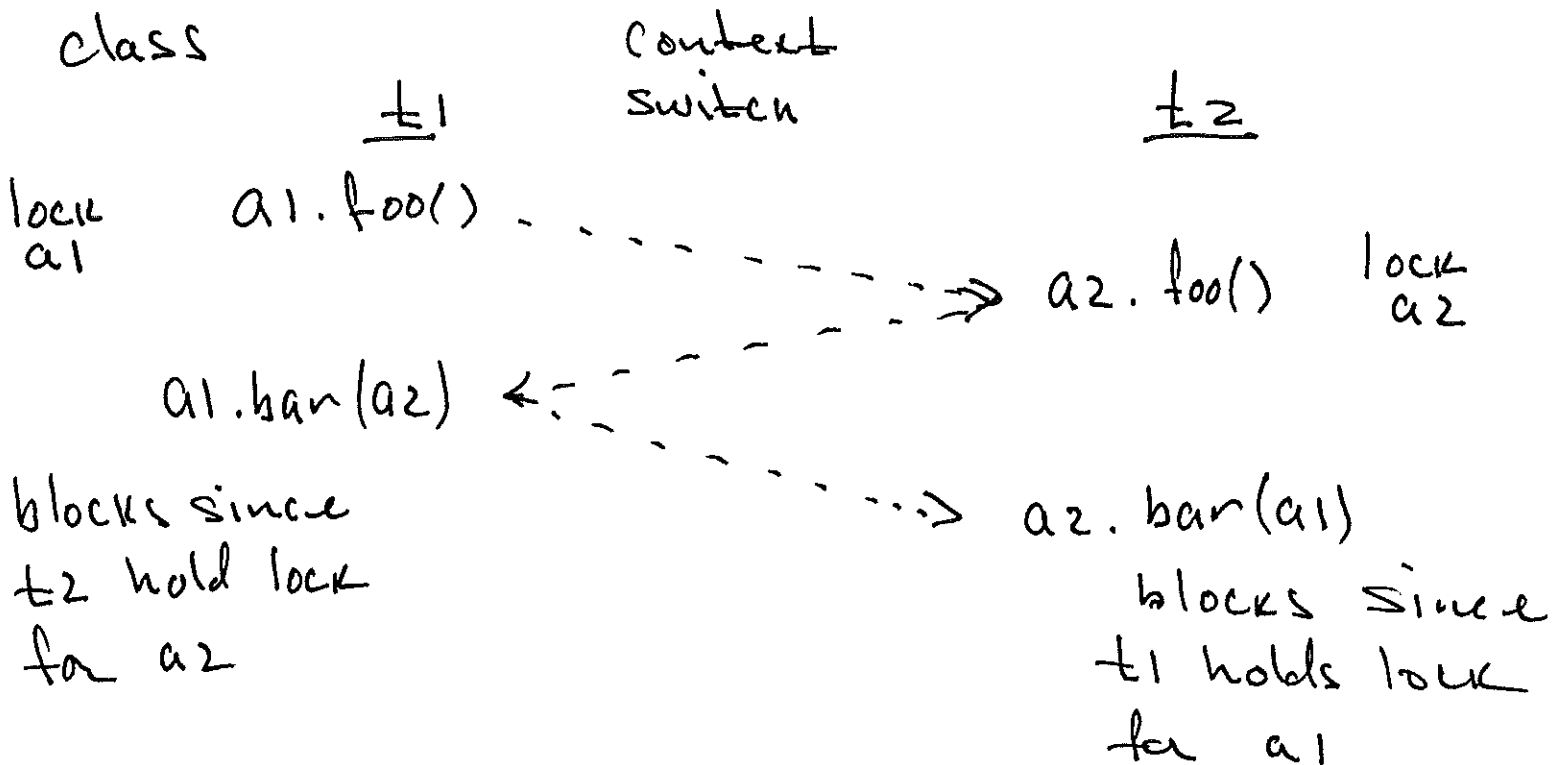
In some other class:

```

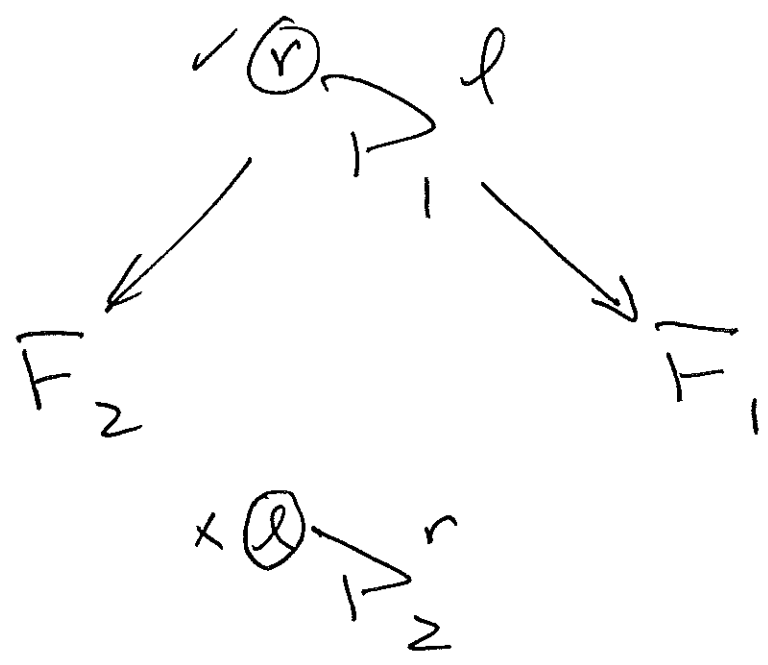
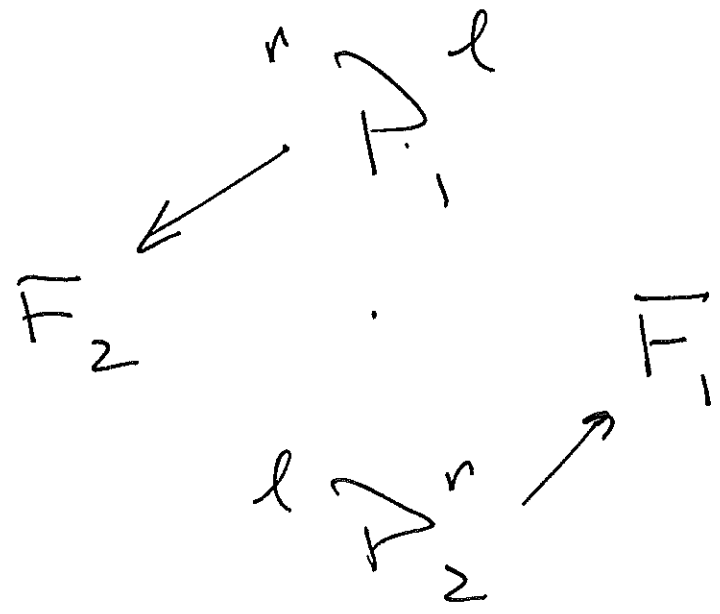
A a1 = new A();
A a2 = new A();

```

then sync. both a1 & a2 in some Thread class

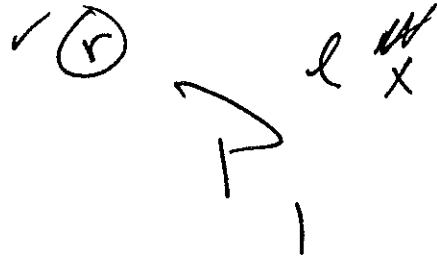


Ex. 2 Philosophers:



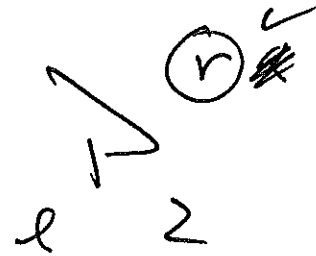
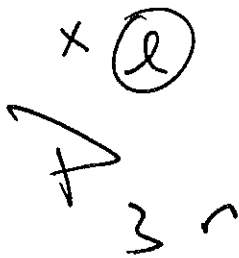
Ex. 3 Philosophers

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F_3

F_1



F_2