

JVM Concurrency Problems




Concurrency Problems

Race conditions

```
def buy(bankAccount: BankAccount, thing: String, price: Int): Unit = {  
  /*  
    involves 3 steps:  
    - read old value  
    - compute result  
    - write new value  
  */  
  bankAccount.amount -= price  
}
```

critical section



Threads must synchronize on critical sections

- only one thread can execute this code at the same time

Sleep fallacy

- synchronizing threads with sleep times does not change guarantees

Most concurrency problems arise from using mutable data

Scala rocks

(vars suck at concurrency.)

