

MultiThreading

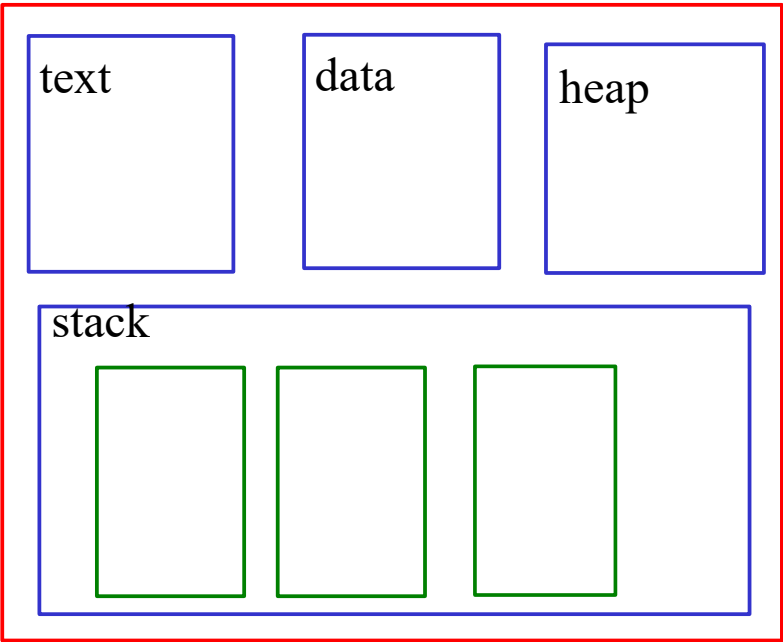
Program  
- A set of instructions

Process  
- A Program in execution is called as process

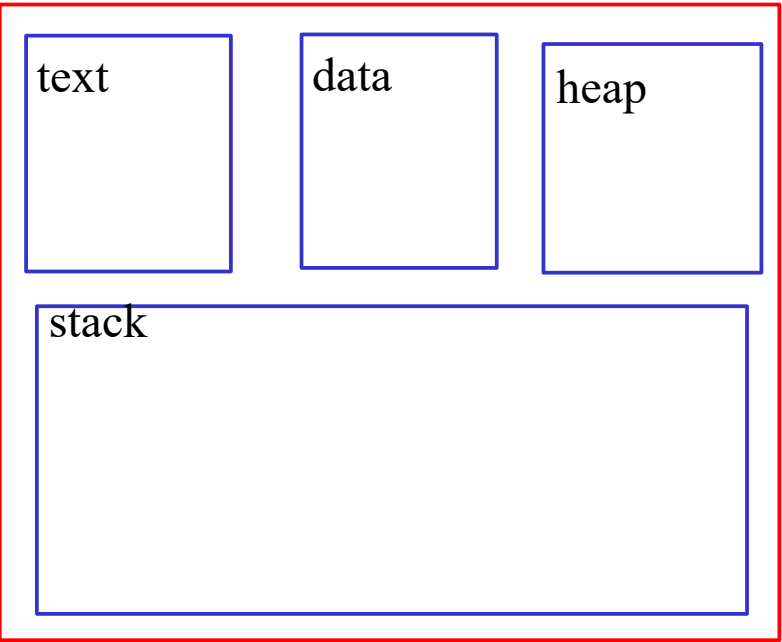
PCB(Process Control Block)



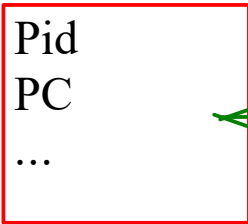
Process



Process



PCB(Process Control Block)



TCB (Thread Control Block)



TCB (Thread Control Block)



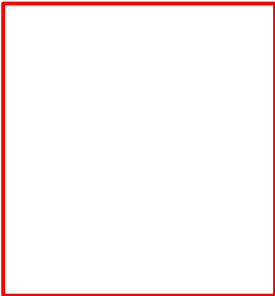
TCB (Thread Control Block)



java Program

OS -> JVM is executed

PCB

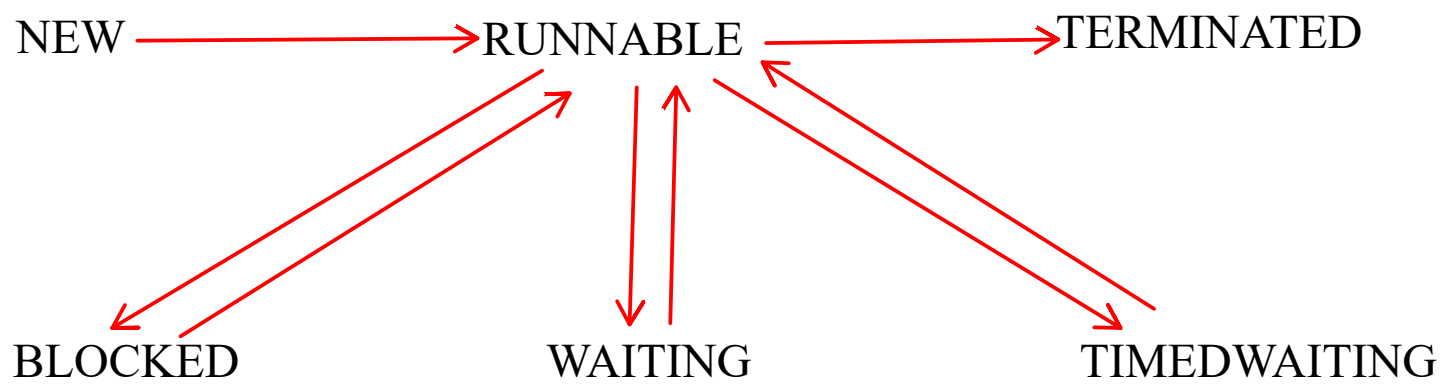


Main thread  
-> main()

GC thread

Thread  
Runnable

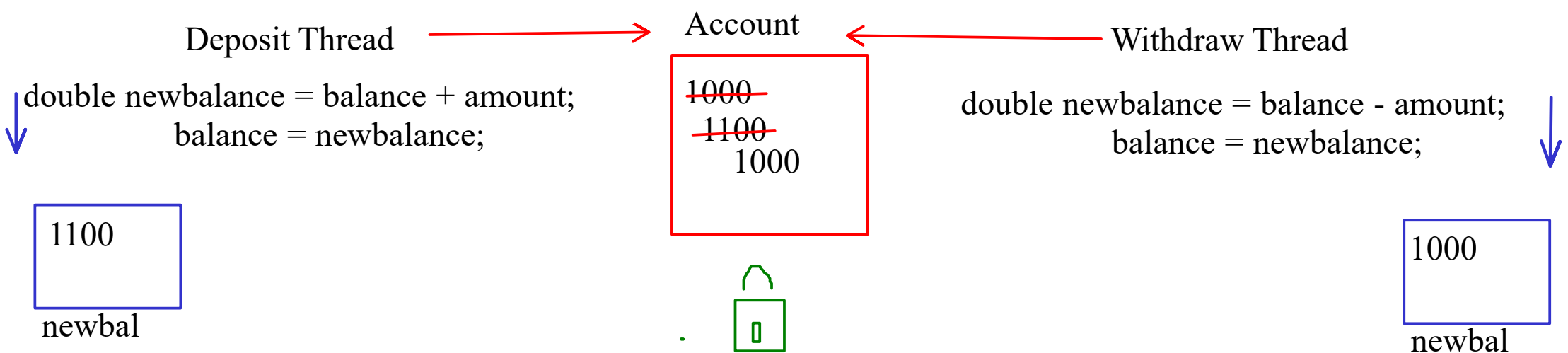
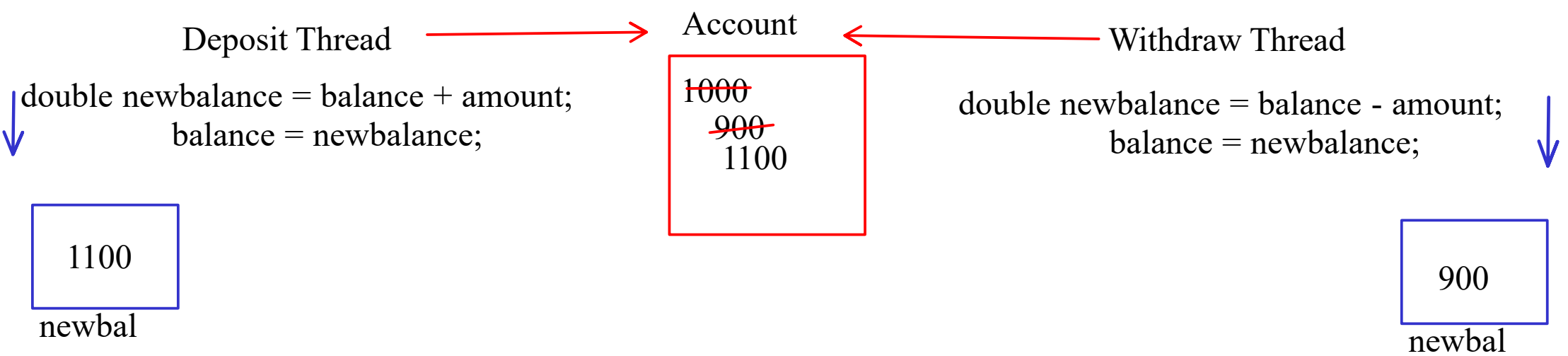
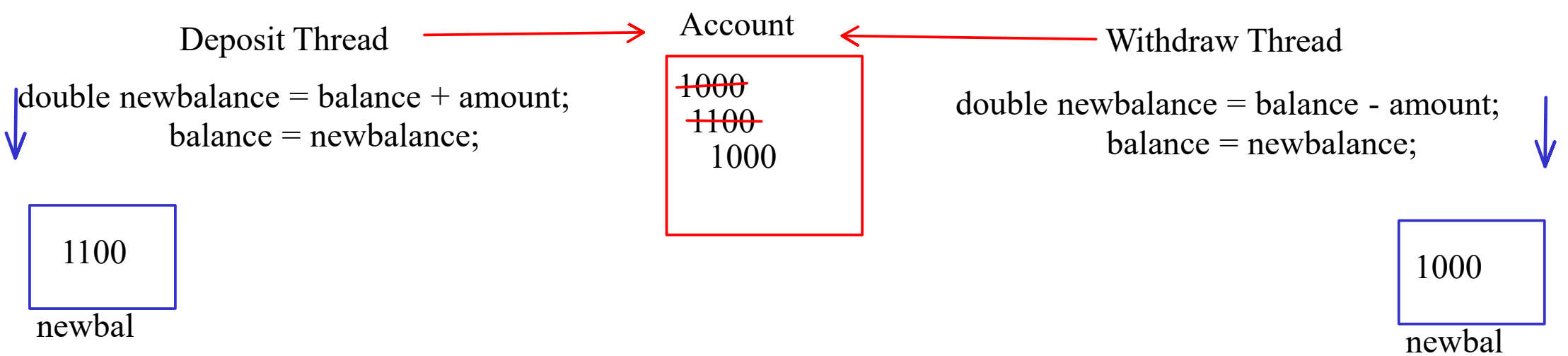
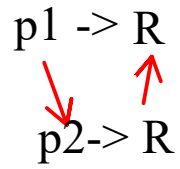
OS Scheduler  
Time to all the process and the threads

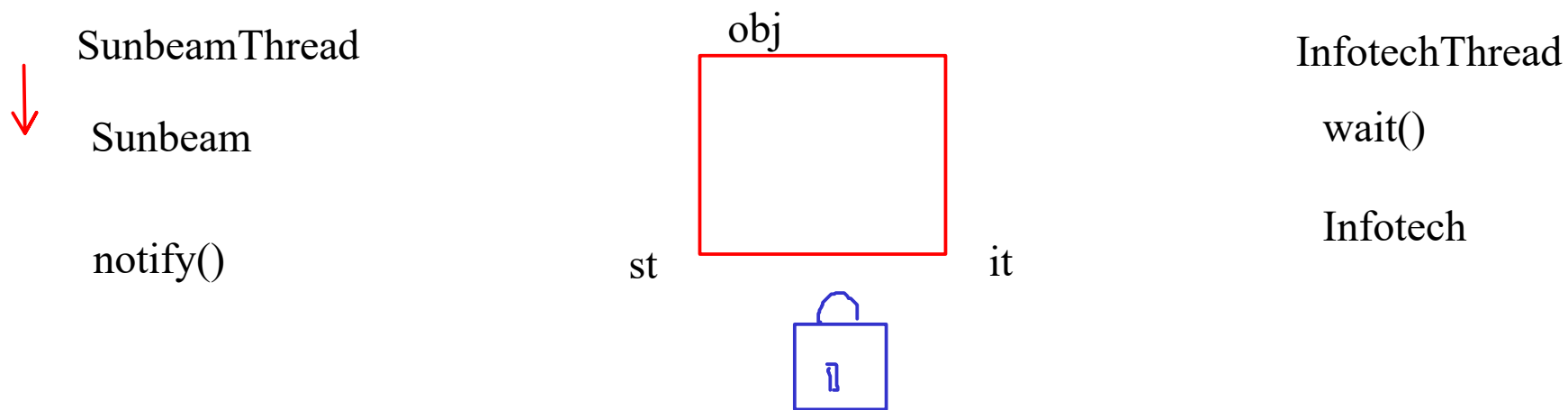
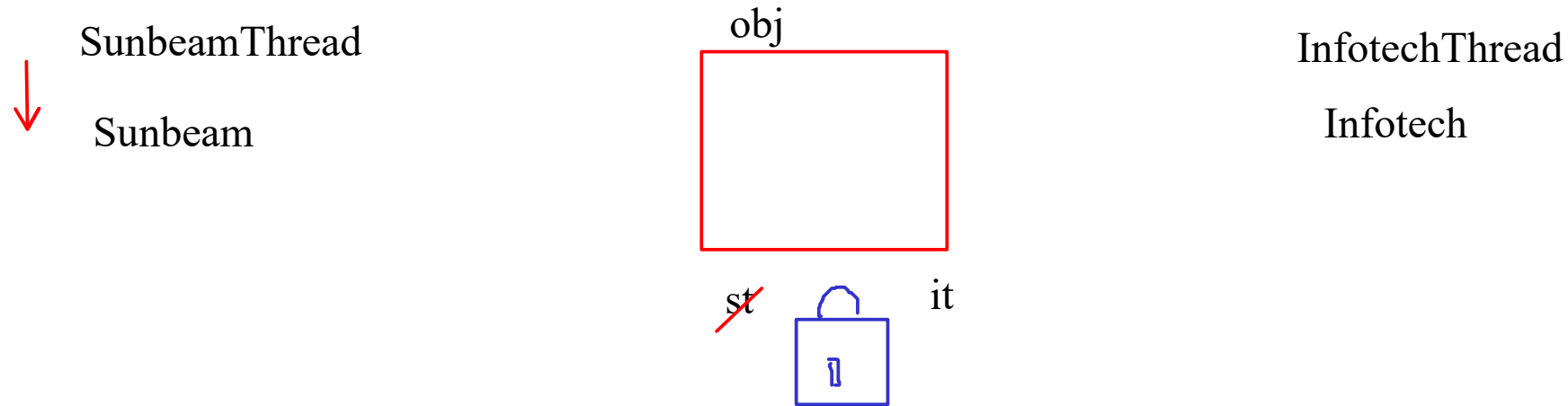


Race Condition

Deadlock

R





Slun.....

Synchronized block -> solution

Sunbeam Infotech

InfotechSunbeam  
wait() -> notify() -> solution

// If started with Infotech first  
Sunbeam Infotech

// if started with sunbeam  
Sunbeam  
// It will go into waiting

Java

OOP ->

Interfaces -> Java8

Lambda Expression

Collection Framework

Stream API

File IO

File NIO

JDBC -> IMP

Class.forName("com.mysql.jdbc.cj.Driver")

Optional o= Optional.empty();

o.orElse();

o.orElseThrow();

DAO

```
interface IEmployeeDao{  
  
}
```

```
class EmployeeDaoImpl implements IEmployeeDao{  
  
}
```

.sql      DAO  
Menu Driven

CCEE -> Remember -> 25

Program based  
1000 + mcq