

# Resources

Deadlocks occur when ...

processes are granted exclusive access to *resources*

e.g. devices, data records, files, ...

**Preemptable resources** can be taken away from a process with no ill effects

e.g. memory

**Nonpreemptable resources** will cause the process to fail if taken away

e.g. CD recorder

In general, deadlocks involve nonpreemptable resources.