

Problem :

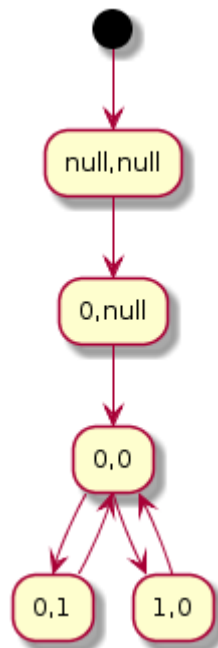
Explain why the ReadWrite.java program does not fully meet the basic requirement of concurrent control ?

Solution :

As per the requirement of concurrency control readers can concurrently access the data. But, in the given program, all the read functions are synchronous and thus doesn't meet the basic requirement of concurrent control.

This can be seen in the JIVE generated state diagram, where we can see that the number of reader count never increased above 1, which means that the read operations are synchronous.

This can also be seen in the Sequence diagram, where all the read operation work synchronously.(attached with the other project documents.)



JIVE generated state diagram for Database.r and Database.w