# Task 4 Interest

# Task 5 Theory

## What is a transaction for Spock Bank?

A transaction in databases contain on or more SQL statements (one or more actions). A transaction is said to follow ACID properties, which are as follows:

* Atomicity – All tasks are performed or none
* Consistency – All edits to the database must leave it in a stable state
* Isolation – Transaction effects are not visible until committed
* Durability – Transaction completes

In this instance, a transaction would be the repayment of a loan.

## What is a schedule, and how is it different from a transaction?

A schedule is a sequence of read/write operations that are used with concurrent transactions. It preserves the order of the operations within each individual transaction. A way of understanding this is for every transaction in a schedule the order operation in the transaction must be the same in the schedule.

This is different to a transaction as instead of performing one block of actions, a schedule manages multiple transactions to ensure that concurrency is met.

## Define and explain conflict serializable schedule. Does it guarantee consistency? Why or why not?

Conflict serializable schedules will order any conflicting operation to run in the same way as a serial execution of a schedule. A serial schedule is just operations of a transaction are executed consecutively without other operations from transactions occurring between them.

This would provide consistency; the transaction will finish all its operations before another one could take place on a specific record.

## Do different conflict-serializable schedules made up of the same set of transactions leave a database in the same state (with same value of the corresponding data items) if they started with the same state of the database? Explain your answer.

## Explain what view serializability is, and why it’s being a weaker notion than conflict

## serializability is also its strength.

A schedule is