

BEGIN COPY & PASTE

INSTRUCTIONS

Problem 1.

What does it mean for a database to have Referential Integrity?

YOUR ANSWER HERE:

Logical consistency between Primary and Foreign keys. No Orphans. An Orphan is a key that is alone/the only one. (Pub_id on one table, and lacking pub_id on any/every other table.)

Problem 2.

YOUR ANSWER HERE:

Which SQL statements are used to save or undo your changes to the database since your last save and how do you use them?

YOUR ANSWER HERE:

COMMIT - a statement that saves all the changes made to the data base since the last COMMIT.

ROLLBACK - a statement that un-does all the changes made to the data base since the last ROLLBACK or COMMIT.

Here is a ROLLBACK/COMMIT statement from chat gpt.

If conditions are not met, will rollback to previous commit/rollback. If they are met, it will save all changes made to the data base.

```
-- Start a transaction
BEGIN TRANSACTION;

-- Perform some modifications (insert, update, delete, etc.)
UPDATE your_table
SET column1 = 'new_value'
WHERE your_condition;

-- Check a condition before committing or rolling back
IF (your_condition_is_not_met) THEN
    -- Rollback the transaction if the condition is not met
    ROLLBACK;
ELSE
    -- Commit the transaction if the condition is met
    COMMIT;
END IF;
```

Problem 3.

Which SQL statement is used to give users access to tables/columns in the database and which statement is used to take away access to table/columns in the database and how do you use them?

YOUR ANSWER HERE:

GRANT - gives a user access rights to a table or columns on a table

REVOKE - removes user access rights to a table or columns on a table

Giving rights to insert/update to perrys, smithj.

```
GRANT INSERT, UPDATE
```

```
ON book
```

```
TO perrys, smithj;
```

Remove the ability to allow jonesk to update.

```
REVOKE UPDATE
```

```
ON book(advance, price)
```

```
FROM jonesk;
```