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ANTRA Assignment

1-27 See SQL File

28. Transactions, Locks, and Isolation Levels assist in maintaining to concurrency for the Database. One issue for databases, especially ones where multiple connections are active at the same time, is maintaining the data as updates come in from different sources. Transactions help by creating atomic units of updates for the database, meaning all the statements in a transaction will be all committed or rolled back at the same time. Locks are used by the Transactions in order to ensure atomicity. They reserve the table or row to be used to be used exclusively by the transaction, so that there will be no breakdown in the concurrency during the transaction. This could cause a deadlock however, if several queries need the same set of tables but the tables are split across different transaction locks already. Isolation level determines how the transaction will be isolated from the rest of the database. It affects what locks are used, what data is locked, and how long they are held, among other things.

29.

Note: Team members did not end up working

30.

31. See ER Diagram Below



