**ID: hrajranj**

**Day 3 – 21th May 2025**

**Task 1:**

Recap of Last session:

Create a file names 21st May.txt and push it to your git hub.

**Task 2:**

**ACID definitions:**

1. **Atomicity: "All or Nothing"**

Atomicity ensures that a transaction is atomic, it means that either the entire transaction completes fully or doesn't execute at all. There is no in-between state i.e., transactions do not occur partially.

1. **Consistency: Maintaining Valid Data States**

Consistency ensures that a database remains in a valid state before and after a transaction. It guarantees that any transaction will take the database from one consistent state to another, maintaining the rules and constraints defined for the data. In simple terms, a transaction should only take the database from one valid state to another.

1. **Isolation: Ensuring Concurrent Transactions Don't Interfere**

This property ensures that multiple transactions can occur concurrently without leading to the inconsistency of the database state. Transactions occur independently without interference.

1. **Durability: Persisting Changes**

This property ensures that once the transaction has completed execution, the updates and modifications to the database are stored in and written to disk and they persist even if a system failure occurs. These updates now become permanent and are stored in non-volatile memory**.**

RDBMS Doc 4.pdf

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NOSQL Doc 5 pdf

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