Delta Live Tables (DLT) Interview Questions & Answers

Q: What is Delta Live Tables?

A: A declarative framework in Databricks to build reliable, maintainable, and automated data pipelines using SQL or Python APIs.

Q: What are Live and Streaming Tables?

A: Live tables are batch tables updated periodically. Streaming tables continuously ingest data from streaming sources like Kafka or Event Hubs.

Q: How does DLT handle data quality?

A: Through expectations that define constraints. For example: 'EXPECT(col IS NOT NULL)' will fail records that don't meet this rule.

Q: How does DLT integrate with Delta Lake?

A: DLT uses Delta Lake as the underlying storage for ACID transactions, schema evolution, and time travel.

Q: What are advantages of DLT over traditional ETL?

A: Automatic lineage tracking, simplified deployment, and reduced manual orchestration.

Q: Explain 'expectations' in DLT.

A: They define data quality rules. You can set them as 'expectations' or 'expect_or_drop' to handle invalid rows.

Q: How to schedule a DLT pipeline?

A: DLT pipelines can be scheduled via Databricks Workflows or triggered programmatically using the REST API.

Q: Can DLT handle incremental loads?

A: Yes, using the Delta change data feed (CDF) or incremental streaming logic.

Q: What is the difference between a materialized view and a DLT table?

A: Materialized views cache query results, while DLT tables represent managed pipeline transformations with dependency tracking.

Q: How to debug DLT pipeline failures?

A: Through event logs and lineage graph in Databricks UI or by querying system tables under the DLT schema.