Delta lake and operations

[Jobaouhadancse2021@jerusalemengg.ac.in](mailto:Jobaouhadancse2021@jerusalemengg.ac.in)

Job Aoushadan N - 11.08.2025

1.key differences between a database, data warehouse, and data lake?

Databases, data warehouses, and data lakes are all used to store data. So what's the difference?

The key differences between a database, a data warehouse, and a data lake are that:

* A database stores the current data required to power an application.
* A data warehouse stores current and historical data from one or more systems in a predefined and fixed schema, which allows business analysts and data scientists to easily analyze the data.
* A data lake stores current and historical data from one or more systems in its raw form, which allows business analysts and data scientists to easily analyze the data.

## 2. Delta table and its operations

Create a table.

Upsert to a table.

Read from a table.

Display table history.

Query an earlier version of a table.

Optimize a table.

Add a Z-order index.

Vacuum unreferenced files.

## 

## 

## 

## 

## 

## 

## 

## 

## 

## 

## 

## 

## 

## 

## 