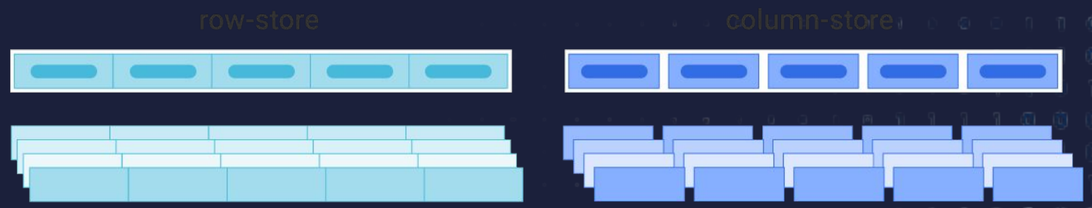
PW SKILLS

Columnar Database

What are columnar databases ?

- Instead of storing the data in a row based manner, columnar databases store the whole column in the hard disk.
- Storage is column wise rather than row wise (as we saw in RDBMS)



In what use cases columnar databases are used

1. For analytics

It is convenient to identify max,min,mean values for a set of same kind of data over a column. Finding output becomes fast and easy.

In what use cases columnar databases are used

2. Efficient storage

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In what use cases columnar databases are used

3. Data Warehousing

In the era of big data, a huge amount of data is stored across databases. For efficient storage, columnar databases are the preferable choice.

Challenges with columnar databases

1. Data modelling is complex

The common approach to data modelling is using row family. The concept of understanding it wrt column family requires different expertise and is a more complex process.

Challenges with columnar databases

2. Specialised tools and expertise is required to optimise the performance of database.

*Cassandra is the most commonly used columnar database.

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THANK YOU