Task # 02

Data Mart is a storage system that contains information specific to an organizations business unit. This can help analyze department-specific information more efficiently.

Data Lakehouse:- A data lake is a vast pool of raw data, whoose purpose is not yet defired. So a data Lakehouse is a storage system that offers data lake benifits with data warehouse style features i.e. SQL functi and schema.

Data Mesh is a decentralized data architecture that organizes data by a specific domain i.e. marketing, sales, customer support etc. Data mesh provide solution to the short-comings of data lakes by allowing greater autonomy and flexibility to data owners.

DWH vs Data Lake

Data warehouse is a repository of well structured filtered data that is processed for a specific goal. While Data Lake is storage of huge volume & raw data whose purpose is not yet defined. DWH is more purpose oriented while data is not purpose specific.

OLTP	OLAP
- Online Transaction processing.	- Online Analytical processing
- It captures stores and process data from transactions in real time	- It uses complex queries to ~~process~~ analyze aggregated historical data from OLTP syt.
- It is designed for large amount of transactional data involving multiple users.	- It is designed to analyze large amounts of data quickly.