

Data Mart:-

It is a data storage system that contains info specific to an organization business unit

Data lakehouse:-

It is new, open data management architecture that combine the flexibility, cost-efficiency & scale of data lake with the data management.

Data mesh:-

It is ^{de}centralize data architecture that organizes data by a specific business domain.

Data Lake

vs

Data warehouse.

Data is Raw

Data is processed.

Purpose of data

Is not yet determine

Purpose is used by business professionals.

Users are data

Scientists

Users are Business professional.

OLAP

vs

OLTP

Online transactional system

Online data retrieving and data analysis system.

Insert, update delete

Extract data.

OLTP & its transactions are original source of data.

Different OLTP database/become source of data.

OLTP has short transaction

OLAP has long transactions

Q1:- Yes database can be used as data warehouse

Q2:- Structured data is organized in specific format and unstructured does not have specific format.

Q3:- Data engineer is responsible for designing, building & maintaining the infrastructure & architecture necessary for storing, processing & analyzing large volume of data.