

1. Define Basic of Data ware house

Data ware house is a centralized repository that store integrated data from multiple sources.

Key components

ETL Tools

Data staging Area

Data Storage

MetaData

Query tools.

2. Different between OLTP and OLAP

Purpose

Day to day transaction

Analysis and decision
Support

Speed

Fast for writes

Fast for reads/
aggregate

Users

Clerks, DBAs

Executive,
Analysts.

Operations

Insert, update, Delete

Select (complex
aggregation)

3. Create a Table OLTP System

```
CREATE TABLE orders  
order_id INT PRIMARY KEY,  
customer_name VARCHAR(100),  
product_name VARCHAR(100),  
quantity INT,  
order_date DATE);
```

4. Create a Table OLAP Table

```
CREATE TABLE monthly_sales_summary  
month_year VARCHAR(17),  
product_name VARCHAR(100),  
total_quantity INT,  
total_revenue DECIMAL(10,2),  
PRIMARY KEY (month_year, product_name);
```

5. Simulate Transactional OLTP Inserts

```
INSERT INTO orders VALUES  
(101, "Anand", "wireless mouse", 2,  
'2025-07-12');
```