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**Title of Experiment :** Data Warehouse Construction

a) Real life Problem to be defined for Warehouse Design

b) Construction of star schema and snowflake schema

c) ETL Operations.

**Objective of Experiment :**

To understand how a data warehouse is designed , construction of Star schema and snowflake schema and ETL Operations.

**Outcome of Experiment :**  Build a data warehouse

**Problem Statement :**

Construct a data warehouse on a real life problem , with star and snowflake schema (also perform ETL operation).

**Description / Theory :**

Data warehouses store integrated data for analysis. Star schemas connect fact and dimension tables for simpler querying. Snowflake schemas normalize dimension tables, trading storage for complexity.

**Program with output :**

| 1. | **A) Implementation of the STAR Schema**  **SPECTATOR TABLE:**  **Output Screenshots :**    **LOCATION TABLE:**  **GAME TABLE:**    **G\_DATE TABLE:**    **GAME STATS TABLE:** |
| --- | --- |
| 2. | **QUERY on STAR SCHEMA:**  **Output Screenshots :** |
| 3. | **Implementation of ETL**  **CREATING TABLE SALEST:**    **CREATING TABLE SALES\_DETAILS:** |
| 4. | **EXTRACTION:**  **CREATING TABLE SALES\_RECORDS:** |
| 5. | **TRANSFORMATION:**  **INSERTING VALUES INTO SALES\_DETAILS:**    **UPDATING VALUES OF SALES\_RECORDS:** |
| 6. | **LOADING:**  **CREATING VIEW CATALOG1:**    **CATALOG 2 :**    **VIEW CREATED FOR CATEGORY:** |

**Results and Discussions :**

The experiment produced a functional data warehouse through star and snowflake schema design, ETL operations, enabling insightful analysis of retail sales data and fostering discussions on schema choices, ETL challenges, business implications, scalability, and future enhancements.