Project Title:

E-Store Database Management

OBJECTIVE:

To design and implement a relational database system for managing product details and orders details. The system aims to streamline the management of Order details, Customer details and product details.

TECHNOLOGIES USED:

- Database Management System: PostgreSQL / Oracle.
- SQL for querying and manipulating the database.
- PL/SQL for stored procedures and functions.

PROJECT DESCRIPTION:

The E- Store Database Management is a comprehensive database application designed to manage various aspects of a store operations. The database will store information about customers, orders and product details allowing for efficient retrieval and management of data.

KEY FEATURES:

1. **Customer Management:**
    a. Store details of customers including customer ID, name and contact information.
    b. Implement functionalities to add new customers, update customer information, and manage customer details.
2. **Order Management:**
    a. Store order information such as order ID, order list,order date and payment mode.
    b. Implement functionalities to add new orders and update order details.
3. **Product Management:**
    a. Store product details including product ID, name,brand,price and rating..
    b. Implement functionalities to add new products, update product information, and manage discount offerings.

DATABASE SCHEMA DESIGN:

- **Customers Table:**
  - **Customer ID(Primary Key)**
  - Name
  - Contact number
- **Orders Table:**
  - **Order ID(Primary Key)**
  - Order list
  - Order date
  - Payment mode
  - **Customer ID(Foreign Key)**
- **Products Table:**
  - **Product ID(Primary Key)**
  - Name
  - Brand
  - Price
  - Rating

SAMPLE SQL QUERIES :

1.Retrieve matching data from customers table and orders table using joins:

SQL> select * from customers c left outer join orders o on c.cus_id=o.cus_id;

OUTPUT>

CUS_ID	NAME	CONTACT_NO	Ord_ID	CUS_ID	ORD_DETAILS	ORD_DATE	ORD_PAYMENT
300	Riya	7598462577	1040	300	Women shoes	2024-06-01	COD
301	Diya	9847562845	1041	301	Men shirt	2024-06-14	COD
302	Siya	8456966147	1042	302	Handbags,Men shirt	2024-06-15	Online
303	Piya	9647583211	1043	303	Women shoes	2024-06-27	COD
300	Riya	7598462577	1044	300	Handbags	2024-06-01	COD

2. Retrieve data by Case Expression:

SQL> select * from select p_name,p_brand,p_rating ,
case
when P_rating >=4 then 'High rated product'
else "Low rated product'
end as p_rates from products;

OUTPUT>

PRO_ID	NAME	BRAND	RATING	RATES
101	Women shoes	Red tape	4.1	High rated product
102	Women tops	zara	3.9	Low rated product
103	Men shirt	H & M	4	High rated product
104	Handbags	Mango	2.9	Low rated product

CONCLUSION:

This E - Store Management project demonstrates ability to design and implement a relational database, write complex SQL queries, and manage various store operations.