Lab Assignment 2

Databases (BSE 4A & 4B)
Semester: Spring 23
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Consider the following Schema (Order Handling App) to answer the questions below,

Customer (Customerno varchar2 (5), Cname varchar2 (50));

Implement check constraints to check Customerno starts with 'C'.

Cust_Order (Orderno varchar2 (5), Odate Date, Customerno references Customer, Ord_amt number (8));

Implement check constraints to check Orderno starts with 'O'.

Ord_amt is derived attribute (default value is 0);

Item (Itemno varchar2 (5), Item_name varchar2 (30), unit_price number (5));

Implement check constraint to check Itemno starts with 'I'.

Order_item (Orderno references Cust_order, Itemno references item, qty number (3));

Primary Key is underlined.

Questions

1. Develop DDL to implement above schema enforcing primary key, check constraints and foreign key constraints (ER Diagram and ER Model into a Relational Model)
2. Populate Database with rich data set.
3. Develop SQL query to list the details of customers who have placed more than 3 orders.
4. Develop a SQL query to list details of items whose price is less than the average price of all items in each order.
5. Develop a SQL query to list the orderno and number of items in each order.
6. Develop a SQL query to list the details of items that are present in 25% of the orders.
7. Develop an update statement to update the value of Ord_amt.
8. Create a view that keeps track of detail of each customer and number of Order placed.