1.Diagram

Description automatically generated

2.

SELECT p.\*, MAX(td.Quantity) AS max\_quantity, c.gender

FROM Products p

INNER JOIN TransactionsDetails td on p.Product\_id = td.Product\_id

INNER JOIN Transactions t on td.Transaction\_id = t. Transaction\_id

INNER JOIN Customers c on t.Customer\_id = c.Customer\_id

GROUP BY c.gender

ORDER BY max\_quantity;

3.

SELECT c.\*, MAX(total\_money)

FROM (

SELECT SUM(td.Quantity \* p.Product\_price), Transaction\_id

FROM TransactionsDetails td

INNER JOIN Products p on p.Product\_id = td. Product\_id

GROUP BY td.Transaction\_id) as total\_money

INNER JOIN Transactions t on t.Transaction\_id = total\_money.Transaction\_id

INNER JOIN Customers c on t.Customer\_id = c.Customer\_id;

4.

SELECT HOUR(Transaction\_Date), WEEKDAY(Transaction\_Date), COUNT(\*)

FROM Transactions

GROUP BY HOUR(Transaction\_Date) + 1, WEEKDAY(Transaction\_Date)

ORDER BY HOUR(Transaction\_Date), WEEKDAY(Transaction\_Date);