**“ E-COMMERCE SHOPPING MANAGEMENT SYSTEM ”**

### **A Project Submitted to the**

### **IT VEDANT Institute, Thane.**

**Data Science & Data Analytics With AI**



**SQL PROJECT**

**BY**

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Under the Guidance of

**Mr. Sameer Warsolkar**

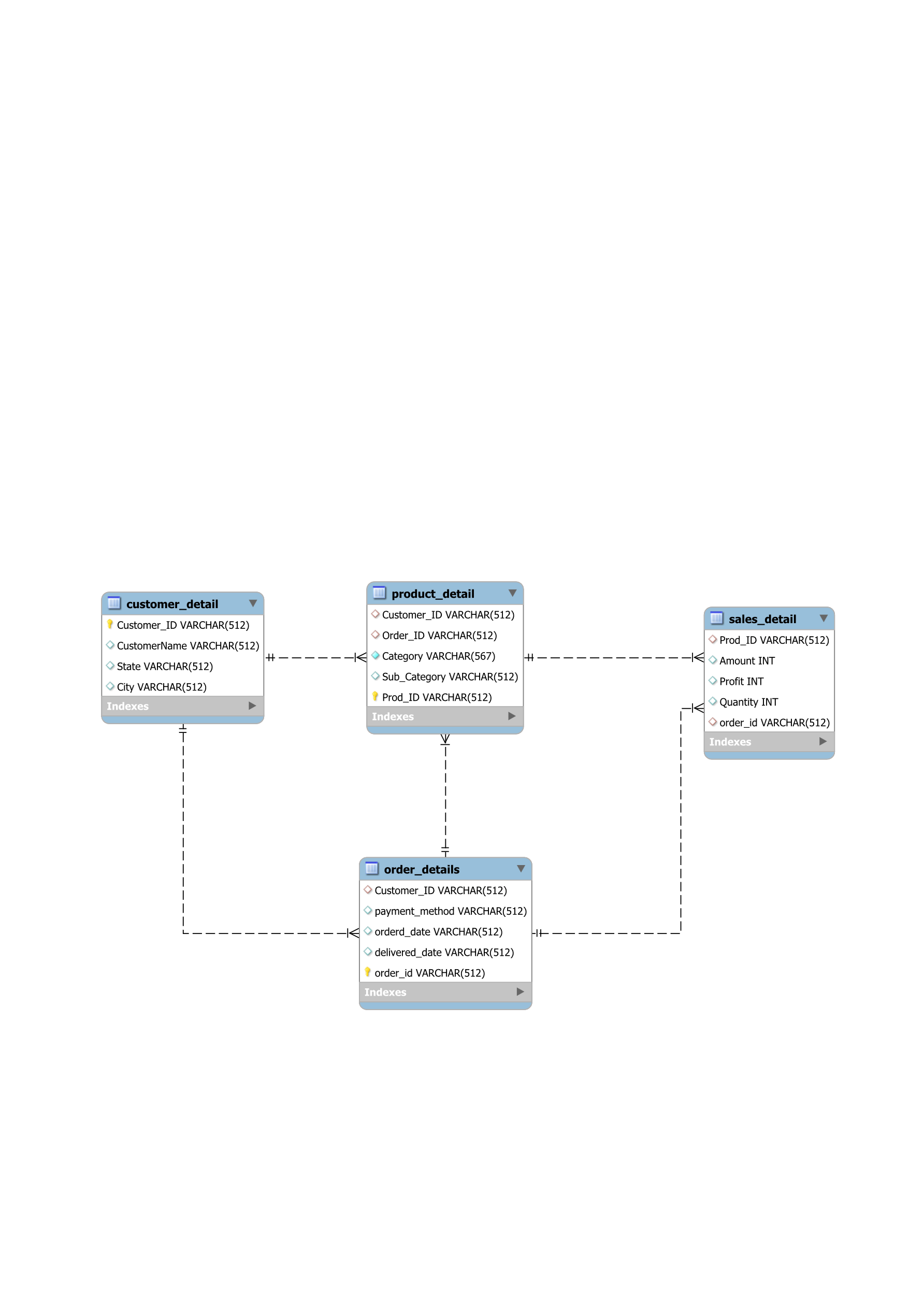
**ABSTRACT**

The project involves the creation and management of a relational database for an e-commerce platform. The database comprises several interconnected tables, including Customer\_Detail, Product\_Detail, Order\_details, and Sales\_Detail. Customer\_Detail records customer information, while Product\_Detail captures details about the products and associates them with customers and orders. Order\_details logs information about customer orders, including payment methods and order dates. Finally, Sales\_Detail tracks the sales-related data, such as the amount, profit, and quantity of products associated with each order. The project demonstrates the organization of data in a structured manner, enabling effective retrieval and analysis of information related to customers, products, orders, and sales within the e-commerce system.

**ER – DIAGRAM (Entity Relation Diagram) :-**

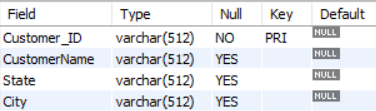
Primary Keys :-

1. Customer\_ID
2. Prod\_ID
3. Order\_id

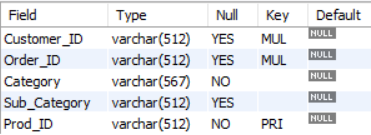


**Table Descriptions :-**

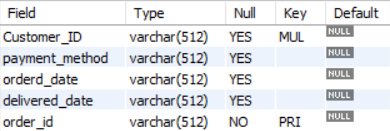
1. Customer\_Detail



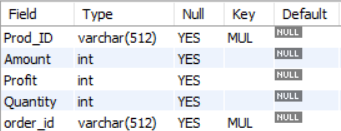
1. Product\_Detail



1. Order\_details



1. Sales\_Detail



**COMMANDS :-**

**Creating Tables -**

**Create Table Customer\_Detail :**

CREATE TABLE Customer\_Detail (

Customer\_ID VARCHAR(512) PRIMARY KEY,

CustomerName VARCHAR(512),

State VARCHAR(512),

City VARCHAR(512));

**Create Table Product\_Detail :**

CREATE TABLE Product\_Detail (

Customer\_ID VARCHAR(512),

Order\_ID VARCHAR(512),

Category VARCHAR(512),

Sub\_Category VARCHAR(512),

Prod\_ID VARCHAR(512) PRIMARY KEY,

FOREIGN KEY (Customer\_ID) REFERENCES Customer\_Detail(Customer\_ID),

FOREIGN KEY (Order\_ID) REFERENCES Order\_details(Order\_ID));

**Create Table Order\_details**

CREATE TABLE Order\_details (

Customer\_ID VARCHAR(512),

payment\_method VARCHAR(512),

orderd\_date VARCHAR(512),

delivered\_date VARCHAR(512),

order\_id VARCHAR(512) PRIMARY KEY,

FOREIGN KEY (Customer\_ID) REFERENCES Customer\_Detail(Customer\_ID));

**Create Table Sales\_Detail**

CREATE TABLE Sales\_Detail (

Prod\_ID VARCHAR(512),

Amount INT,

Profit INT,

Quantity INT,

order\_id VARCHAR(512),

FOREIGN KEY (order\_id) REFERENCES Order\_details(order\_id),

FOREIGN KEY (Prod\_ID) REFERENCES Product\_Detail(Prod\_ID));

**Populating Tables –**

**Populate Customer\_Detail Table :-**

INSERT INTO Customer\_Detail (Customer\_ID, CustomerName, State, City) VALUES

('B-25601', 'Bharat', 'Gujarat', 'Ahmedabad'),

('B-25602', 'Pearl', 'Maharashtra', 'Pune'),

('B-25603', 'Jahan', 'Madhya Pradesh', 'Bhopal'),

('B-25604', 'Divsha', 'Rajasthan', 'Jaipur'),

('B-25605', 'Kasheen', 'West Bengal', 'Kolkata'),

('B-25606', 'Hazel', 'Karnataka', 'Bangalore'),

('B-25607', 'Sonakshi', 'Jammu and Kashmir', 'Kashmir'),

('B-25608', 'Aarushi', 'Tamil Nadu', 'Chennai'),

('B-25609', 'Jitesh', 'Uttar Pradesh', 'Lucknow'),

('B-25610', 'Yogesh', 'Bihar', 'Patna'),

('B-25611', 'Anita', 'Kerala ', 'Thiruvananthapuram'),

('B-25612', 'Shrichand', 'Punjab', 'Chandigarh'),

('B-25613', 'Mukesh', 'Haryana', 'Chandigarh'),

('B-25614', 'Vandana', 'Himachal Pradesh', 'Simla'),

('B-25615', 'Bhavna', 'Sikkim', 'Gangtok'),

('B-25616', 'Kanak', 'Goa', 'Goa'),

('B-25617', 'Sagar', 'Nagaland', 'Kohima'),

('B-25618', 'Manju', 'Andhra Pradesh', 'Hyderabad'),

('B-25619', 'Ramesh', 'Gujarat', 'Ahmedabad'),

('B-25620', 'Sarita', 'Maharashtra', 'Pune'),

('B-25621', 'Deepak', 'Madhya Pradesh', 'Bhopal'),

('B-25622', 'Monisha', 'Rajasthan', 'Jaipur'),

('B-25623', 'Atharv', 'West Bengal', 'Kolkata'),

('B-25624', 'Vini', 'Karnataka', 'Bangalore'),

('B-25625', 'Pinky', 'Jammu and Kashmir', 'Kashmir'),

('B-25626', 'Bhishm', 'Maharashtra', 'Mumbai'),

('B-25627', 'Hitika', 'Madhya Pradesh', 'Indore'),

('B-25628', 'Pooja', 'Bihar', 'Patna'),

('B-25629', 'Hemant', 'Kerala ', 'Thiruvananthapuram'),

('B-25630', 'Sahil', 'Punjab', 'Chandigarh'),

('B-25631', 'Ritu', 'Haryana', 'Chandigarh'),

('B-25632', 'Manish', 'Himachal Pradesh', 'Simla'),

('B-25633', 'Amit', 'Sikkim', 'Gangtok'),

('B-25634', 'Sanjay', 'Goa', 'Goa'),

('B-25635', 'Nidhi', 'Nagaland', 'Kohima'),

('B-25636', 'Nishi', 'Maharashtra', 'Mumbai'),

('B-25637', 'Ashmi', 'Madhya Pradesh', 'Indore'),

('B-25638', 'Parth', 'Maharashtra', 'Pune'),

('B-25639', 'Lisha', 'Madhya Pradesh', 'Bhopal'),

('B-25640', 'Paridhi', 'Rajasthan', 'Jaipur'),

('B-25641', 'Parishi', 'West Bengal', 'Kolkata'),

('B-25642', 'Ajay', 'Karnataka', 'Bangalore'),

('B-25643', 'Kirti', 'Jammu and Kashmir', 'Kashmir'),

('B-25644', 'Mayank', 'Maharashtra', 'Mumbai'),

('B-25645', 'Yaanvi', 'Madhya Pradesh', 'Indore'),

('B-25646', 'Sonal', 'Bihar', 'Patna'),

('B-25647', 'Sharda', 'Kerala ', 'Thiruvananthapuram'),

('B-25648', 'Aditya', 'Punjab', 'Chandigarh'),

('B-25649', 'Rachna', 'Haryana', 'Chandigarh'),

('B-25650', 'Chirag', 'Maharashtra', 'Mumbai'),

('B-25651', 'Anurag', 'Madhya Pradesh', 'Indore'),

('B-25652', 'Tushina', 'Goa', 'Goa'),

('B-25653', 'Farah', 'Nagaland', 'Kohima'),

('B-25654', 'Sabah', 'Maharashtra', 'Mumbai'),

('B-25655', 'Nida', 'Madhya Pradesh', 'Indore'),

('B-25656', 'Priyanka', 'Maharashtra', 'Pune'),

('B-25657', 'Tulika', 'Madhya Pradesh', 'Bhopal'),

('B-25658', 'Shefali', 'Rajasthan', 'Jaipur'),

('B-25659', 'Sanskriti', 'West Bengal', 'Kolkata'),

('B-25660', 'Shruti', 'Karnataka', 'Bangalore'),

('B-25661', 'Subhashree', 'Jammu and Kashmir', 'Kashmir'),

('B-25662', 'Sweta', 'Maharashtra', 'Mumbai'),

('B-25663', 'Pournamasi', 'Madhya Pradesh', 'Indore'),

('B-25664', 'Pratyusmita', 'Bihar', 'Patna'),

('B-25665', 'Chayanika', 'Kerala ', 'Thiruvananthapuram'),

('B-25666', 'Tanvi', 'Punjab', 'Chandigarh'),

('B-25667', 'Anjali', 'Haryana', 'Chandigarh'),

('B-25668', 'Rhea', 'Himachal Pradesh', 'Simla'),

('B-25669', 'Piyali', 'Sikkim', 'Gangtok'),

('B-25670', 'Charika', 'Goa', 'Goa'),

('B-25671', 'Mitali', 'Nagaland', 'Kohima'),

('B-25672', 'Akanksha', 'Andhra Pradesh', 'Hyderabad'),

('B-25673', 'Arsheen', 'Gujarat', 'Ahmedabad'),

('B-25674', 'Mahima', 'Maharashtra', 'Pune'),

('B-25675', 'Shreya', 'Madhya Pradesh', 'Bhopal'),

('B-25676', 'Chandni', 'Rajasthan', 'Jaipur'),

('B-25677', 'Ekta', 'West Bengal', 'Kolkata'),

('B-25678', 'Bathina', 'Karnataka', 'Bangalore'),

('B-25679', 'Avni', 'Maharashtra', 'Mumbai');

**Populate Product\_Detail Table :-**

INSERT INTO Product\_Detail (Customer\_ID, Order\_ID, Category, Sub\_Category, Prod\_ID) VALUES

('B-25601', 'O-10076', 'Furniture', 'Bookcases', 'P-1065'),

('B-25602', 'O-10071', 'Clothing', 'Stole', 'P-1075'),

('B-25603', 'O-10089', 'Clothing', 'Hankerchief', 'P-1001'),

('B-25604', 'O-10016', 'Electronics', 'Electronic Games', 'P-1032'),

('B-25605', 'O-10009', 'Electronics', 'Phones', 'P-1056'),

('B-25606', 'O-10011', 'Electronics', 'Phones', 'P-1064'),

('B-25607', 'O-10037', 'Electronics', 'Phones', 'P-1035'),

('B-25608', 'O-10087', 'Clothing', 'Saree', 'P-1016'),

('B-25609', 'O-10040', 'Clothing', 'Saree', 'P-1071'),

('B-25610', 'O-10081', 'Clothing', 'Trousers', 'P-1082'),

('B-25611', 'O-10074', 'Furniture', 'Chairs', 'P-1058'),

('B-25612', 'O-10008', 'Clothing', 'Saree', 'P-1044'),

('B-25613', 'O-10082', 'Clothing', 'Trousers', 'P-1061'),

('B-25614', 'O-10058', 'Clothing', 'Stole', 'P-1091'),

('B-25615', 'O-10038', 'Clothing', 'Stole', 'P-1073'),

('B-25616', 'O-10083', 'Clothing', 'Hankerchief', 'P-1004'),

('B-25617', 'O-10041', 'Clothing', 'Kurti', 'P-1067'),

('B-25618', 'O-10019', 'Clothing', 'T-shirt', 'P-1031'),

('B-25619', 'O-10055', 'Clothing', 'Saree', 'P-1026'),

('B-25620', 'O-10049', 'Clothing', 'Saree', 'P-1024'),

('B-25621', 'O-10092', 'Clothing', 'Shirt', 'P-1013'),

('B-25622', 'O-10057', 'Clothing', 'Leggings', 'P-1074'),

('B-25623', 'O-10023', 'Furniture', 'Tables', 'P-1038'),

('B-25624', 'O-10044', 'Furniture', 'Chairs', 'P-1060'),

('B-25625', 'O-10046', 'Clothing', 'Hankerchief', 'P-1047'),

('B-25626', 'O-10077', 'Electronics', 'Printers', 'P-1029'),

('B-25627', 'O-10025', 'Electronics', 'Electronic Games', 'P-1022'),

('B-25628', 'O-10060', 'Clothing', 'Saree', 'P-1079'),

('B-25629', 'O-10059', 'Electronics', 'Printers', 'P-1055'),

('B-25630', 'O-10062', 'Clothing', 'Stole', 'P-1023'),

('B-25631', 'O-10017', 'Electronics', 'Accessories', 'P-1069'),

('B-25632', 'O-10096', 'Electronics', 'Printers', 'P-1077'),

('B-25633', 'O-10053', 'Clothing', 'Saree', 'P-1063'),

('B-25634', 'O-10072', 'Furniture', 'Furnishings', 'P-1085'),

('B-25635', 'O-10002', 'Clothing', 'Saree', 'P-1095'),

('B-25636', 'O-10056', 'Furniture', 'Chairs', 'P-1012'),

('B-25637', 'O-10001', 'Clothing', 'Saree', 'P-1051'),

('B-25638', 'O-10042', 'Furniture', 'Bookcases', 'P-1049'),

('B-25639', 'O-10027', 'Electronics', 'Electronic Games', 'P-1007'),

('B-25640', 'O-10078', 'Clothing', 'Hankerchief', 'P-1045'),

('B-25641', 'O-10095', 'Clothing', 'Hankerchief', 'P-1028'),

('B-25642', 'O-10084', 'Clothing', 'Stole', 'P-1018'),

('B-25643', 'O-10005', 'Clothing', 'Hankerchief', 'P-1097'),

('B-25644', 'O-10061', 'Clothing', 'Hankerchief', 'P-1027'),

('B-25645', 'O-10045', 'Electronics', 'Electronic Games', 'P-1092'),

('B-25646', 'O-10033', 'Furniture', 'Bookcases', 'P-1036'),

('B-25647', 'O-10004', 'Clothing', 'Hankerchief', 'P-1042'),

('B-25648', 'O-10093', 'Clothing', 'Saree', 'P-1093'),

('B-25649', 'O-10073', 'Electronics', 'Printers', 'P-1039'),

('B-25650', 'O-10098', 'Electronics', 'Electronic Games', 'P-1033'),

('B-25651', 'O-10036', 'Electronics', 'Electronic Games', 'P-1072'),

('B-25652', 'O-10051', 'Electronics', 'Phones', 'P-1006'),

('B-25653', 'O-10054', 'Clothing', 'Saree', 'P-1089'),

('B-25654', 'O-10052', 'Clothing', 'Stole', 'P-1050'),

('B-25655', 'O-10091', 'Clothing', 'Stole', 'P-1057'),

('B-25656', 'O-10068', 'Clothing', 'Saree', 'P-1041'),

('B-25657', 'O-10020', 'Clothing', 'Stole', 'P-1009'),

('B-25658', 'O-10028', 'Clothing', 'Hankerchief', 'P-1054'),

('B-25659', 'O-10026', 'Clothing', 'Hankerchief', 'P-1019'),

('B-25660', 'O-10010', 'Clothing', 'Leggings', 'P-1083'),

('B-25661', 'O-10014', 'Clothing', 'Saree', 'P-1034'),

('B-25662', 'O-10064', 'Electronics', 'Phones', 'P-1053'),

('B-25663', 'O-10097', 'Furniture', 'Chairs', 'P-1017'),

('B-25664', 'O-10018', 'Clothing', 'Stole', 'P-1066'),

('B-25665', 'O-10067', 'Clothing', 'Skirt', 'P-1086'),

('B-25666', 'O-10034', 'Clothing', 'Saree', 'P-1025'),

('B-25667', 'O-10003', 'Furniture', 'Furnishings', 'P-1087'),

('B-25668', 'O-10024', 'Clothing', 'Trousers', 'P-1005'),

('B-25669', 'O-10039', 'Clothing', 'Stole', 'P-1010'),

('B-25670', 'O-10012', 'Clothing', 'Kurti', 'P-1099'),

('B-25671', 'O-10032', 'Electronics', 'Phones', 'P-1020'),

('B-25672', 'O-10022', 'Clothing', 'Stole', 'P-1008'),

('B-25673', 'O-10029', 'Clothing', 'T-shirt', 'P-1080'),

('B-25674', 'O-10099', 'Clothing', 'Kurti', 'P-1048'),

('B-25675', 'O-10086', 'Furniture', 'Furnishings', 'P-1030'),

('B-25676', 'O-10094', 'Clothing', 'Leggings', 'P-1015'),

('B-25677', 'O-10006', 'Electronics', 'Phones', 'P-1088'),

('B-25678', 'O-10047', 'Clothing', 'Saree', 'P-1090'),

('B-25679', 'O-10021', 'Clothing', 'Trousers', 'P-1014');

**Populate Order\_details Table :-**

INSERT INTO Order\_details (Customer\_ID, payment\_method, orderd\_date, delivered\_date, order\_id) VALUES

('B-25601', 'EMI', '01-02-2019', '04-02-2019', 'O-10076'),

('B-25602', 'UPI', '01-09-2018', '11-09-2018', 'O-10071'),

('B-25603', 'EMI', '04-05-2018', '14-05-2018', 'O-10089'),

('B-25604', 'UPI', '18-12-2018', '24-12-2018', 'O-10016'),

('B-25605', 'EMI', '05-01-2019', '15-01-2019', 'O-10009'),

('B-25606', 'UPI', '09-10-2018', '15-10-2018', 'O-10011'),

('B-25607', 'UPI', '01-03-2019', '07-03-2019', 'O-10037'),

('B-25608', 'COD', '01-04-2018', '13-04-2018', 'O-10087'),

('B-25609', 'COD', '11-06-2018', '19-06-2018', 'O-10040'),

('B-25610', 'COD', '23-08-2018', '01-09-2018', 'O-10081'),

('B-25611', 'UPI', '01-02-2019', '02-02-2019', 'O-10074'),

('B-25612', 'EMI', '08-07-2018', '09-07-2018', 'O-10008'),

('B-25613', 'UPI', '21-07-2018', '22-07-2018', 'O-10082'),

('B-25614', 'EMI', '09-08-2018', '11-08-2018', 'O-10058'),

('B-25615', 'UPI', '17-12-2018', '25-12-2018', 'O-10038'),

('B-25616', 'UPI', '06-01-2019', '13-01-2019', 'O-10083'),

('B-25617', 'UPI', '01-05-2018', '03-05-2018', 'O-10041'),

('B-25618', 'COD', '02-11-2018', '13-11-2018', 'O-10019'),

('B-25619', 'UPI', '19-11-2018', '25-11-2018', 'O-10055'),

('B-25620', 'COD', '11-08-2018', '12-08-2018', 'O-10049'),

('B-25621', 'COD', '05-09-2018', '12-09-2018', 'O-10092'),

('B-25622', 'EMI', '18-09-2018', '20-09-2018', 'O-10057'),

('B-25623', 'COD', '01-01-2019', '06-01-2019', 'O-10023'),

('B-25624', 'EMI', '12-02-2019', '24-02-2019', 'O-10044'),

('B-25625', 'COD', '21-07-2018', '02-08-2018', 'O-10046'),

('B-25626', 'COD', '05-12-2018', '06-12-2018', 'O-10077'),

('B-25627', 'COD', '01-10-2018', '10-10-2018', 'O-10025'),

('B-25628', 'UPI', '10-06-2018', '20-06-2018', 'O-10060'),

('B-25629', 'UPI', '01-04-2018', '09-04-2018', 'O-10059'),

('B-25630', 'EMI', '01-03-2019', '14-03-2019', 'O-10062'),

('B-25631', 'UPI', '19-10-2018', '22-10-2018', 'O-10017'),

('B-25632', 'COD', '05-03-2019', '07-03-2019', 'O-10096'),

('B-25633', 'EMI', '01-05-2018', '13-05-2018', 'O-10053'),

('B-25634', 'EMI', '01-11-2018', '10-11-2018', 'O-10072'),

('B-25635', 'EMI', '01-06-2018', '09-06-2018', 'O-10002'),

('B-25636', 'EMI', '17-04-2018', '29-04-2018', 'O-10056'),

('B-25637', 'EMI', '01-02-2019', '12-02-2019', 'O-10001'),

('B-25638', 'COD', '01-09-2018', '11-09-2018', 'O-10042'),

('B-25639', 'EMI', '04-05-2018', '08-05-2018', 'O-10027'),

('B-25640', 'UPI', '18-12-2018', '31-12-2018', 'O-10078'),

('B-25641', 'EMI', '05-01-2019', '07-01-2019', 'O-10095'),

('B-25642', 'EMI', '09-10-2018', '19-10-2018', 'O-10084'),

('B-25643', 'COD', '01-03-2019', '06-03-2019', 'O-10005'),

('B-25644', 'UPI', '01-04-2018', '13-04-2018', 'O-10061'),

('B-25645', 'UPI', '11-06-2018', '19-06-2018', 'O-10045'),

('B-25646', 'UPI', '23-08-2018', '29-08-2018', 'O-10033'),

('B-25647', 'EMI', '01-02-2019', '14-02-2019', 'O-10004'),

('B-25648', 'EMI', '08-07-2018', '21-07-2018', 'O-10093'),

('B-25649', 'EMI', '21-07-2018', '31-07-2018', 'O-10073'),

('B-25650', 'EMI', '09-08-2018', '14-08-2018', 'O-10098'),

('B-25651', 'EMI', '17-12-2018', '26-12-2018', 'O-10036'),

('B-25652', 'UPI', '06-01-2019', '12-01-2019', 'O-10051'),

('B-25653', 'UPI', '01-05-2018', '13-05-2018', 'O-10054'),

('B-25654', 'EMI', '02-11-2018', '10-11-2018', 'O-10052'),

('B-25655', 'COD', '19-11-2018', '24-11-2018', 'O-10091'),

('B-25656', 'COD', '11-08-2018', '12-08-2018', 'O-10068'),

('B-25657', 'COD', '05-09-2018', '16-09-2018', 'O-10020'),

('B-25658', 'UPI', '18-09-2018', '19-09-2018', 'O-10028'),

('B-25659', 'COD', '01-01-2019', '12-01-2019', 'O-10026'),

('B-25660', 'EMI', '12-02-2019', '20-02-2019', 'O-10010'),

('B-25661', 'COD', '21-07-2018', '03-08-2018', 'O-10014'),

('B-25662', 'UPI', '05-12-2018', '13-12-2018', 'O-10064'),

('B-25663', 'UPI', '01-10-2018', '06-10-2018', 'O-10097'),

('B-25664', 'UPI', '10-06-2018', '19-06-2018', 'O-10018'),

('B-25665', 'COD', '01-04-2018', '06-04-2018', 'O-10067'),

('B-25666', 'UPI', '01-03-2019', '07-03-2019', 'O-10034'),

('B-25667', 'UPI', '19-10-2018', '30-10-2018', 'O-10003'),

('B-25668', 'COD', '05-03-2019', '10-03-2019', 'O-10024'),

('B-25669', 'EMI', '01-05-2018', '02-05-2018', 'O-10039'),

('B-25670', 'UPI', '01-11-2018', '10-11-2018', 'O-10012'),

('B-25671', 'COD', '01-06-2018', '07-06-2018', 'O-10032'),

('B-25672', 'UPI', '17-04-2018', '20-04-2018', 'O-10022'),

('B-25673', 'EMI', '01-02-2019', '05-02-2019', 'O-10029'),

('B-25674', 'COD', '01-09-2018', '04-09-2018', 'O-10099'),

('B-25675', 'UPI', '04-05-2018', '06-05-2018', 'O-10086'),

('B-25676', 'COD', '18-12-2018', '20-12-2018', 'O-10094'),

('B-25677', 'COD', '05-01-2019', '13-01-2019', 'O-10006'),

('B-25678', 'EMI', '09-10-2018', '20-10-2018', 'O-10047'),

('B-25679', 'COD', '01-03-2019', '06-03-2019', 'O-10021');

**Populate Sales\_Detail Table :-**

INSERT INTO Sales\_Detail (Prod\_ID, Amount, Profit, Quantity, order\_id) VALUES

('P-1065', '1275', '-1148', '7', 'O-10076'),

('P-1075', '66', '-12', '5', 'O-10071'),

('P-1001', '8', '-2', '3', 'O-10089'),

('P-1032', '80', '-56', '4', 'O-10016'),

('P-1056', '168', '-111', '2', 'O-10009'),

('P-1064', '424', '-272', '5', 'O-10011'),

('P-1035', '2617', '1151', '4', 'O-10037'),

('P-1016', '561', '212', '3', 'O-10087'),

('P-1071', '119', '-5', '8', 'O-10040'),

('P-1082', '1355', '-60', '5', 'O-10081'),

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('P-1044', '193', '-166', '3', 'O-10008'),

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('P-1091', '116', '16', '4', 'O-10058'),

('P-1073', '107', '36', '6', 'O-10038'),

('P-1004', '12', '1', '2', 'O-10083'),

('P-1067', '38', '18', '1', 'O-10041'),

('P-1031', '65', '17', '2', 'O-10019'),

('P-1026', '157', '5', '9', 'O-10055'),

('P-1024', '75', '0', '7', 'O-10049'),

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('P-1074', '50', '15', '4', 'O-10057'),

('P-1038', '1364', '-1864', '5', 'O-10023'),

('P-1060', '476', '0', '3', 'O-10044'),

('P-1047', '257', '23', '5', 'O-10046'),

('P-1029', '856', '385', '6', 'O-10077'),

('P-1022', '485', '29', '4', 'O-10025'),

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('P-1023', '107', '-54', '4', 'O-10062'),

('P-1069', '68', '-55', '5', 'O-10017'),

('P-1077', '781', '-594', '6', 'O-10096'),

('P-1063', '43', '0', '3', 'O-10053'),

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('P-1007', '98', '-12', '2', 'O-10027'),

('P-1045', '68', '20', '5', 'O-10078'),

('P-1028', '42', '12', '5', 'O-10095'),

('P-1018', '116', '-56', '5', 'O-10084'),

('P-1097', '22', '-2', '3', 'O-10005'),

('P-1027', '14', '-2', '3', 'O-10061'),

('P-1092', '305', '-270', '5', 'O-10045'),

('P-1036', '362', '127', '1', 'O-10033'),

('P-1042', '12', '0', '2', 'O-10004'),

('P-1093', '353', '90', '8', 'O-10093'),

('P-1039', '193', '46', '1', 'O-10073'),

('P-1033', '233', '-10', '5', 'O-10098'),

('P-1072', '228', '63', '3', 'O-10036'),

('P-1006', '333', '-15', '3', 'O-10051'),

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('P-1050', '53', '1', '4', 'O-10052'),

('P-1057', '158', '69', '3', 'O-10091'),

('P-1041', '149', '-87', '4', 'O-10068'),

('P-1009', '105', '20', '2', 'O-10020'),

('P-1054', '26', '12', '3', 'O-10028'),

('P-1019', '97', '29', '2', 'O-10026'),

('P-1083', '59', '30', '3', 'O-10010'),

('P-1034', '635', '-349', '5', 'O-10014'),

('P-1053', '46', '-14', '1', 'O-10064'),

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('P-1066', '55', '-39', '4', 'O-10018'),

('P-1086', '45', '13', '4', 'O-10067'),

('P-1025', '24', '-9', '4', 'O-10034'),

('P-1087', '35', '-8', '2', 'O-10003'),

('P-1005', '1560', '421', '3', 'O-10024'),

('P-1010', '133', '12', '5', 'O-10039'),

('P-1099', '114', '-39', '5', 'O-10012'),

('P-1020', '143', '-129', '2', 'O-10032'),

('P-1008', '40', '-7', '3', 'O-10022'),

('P-1080', '34', '-22', '4', 'O-10029'),

('P-1048', '42', '-26', '2', 'O-10099'),

('P-1030', '89', '-89', '2', 'O-10086'),

('P-1015', '19', '-2', '2', 'O-10094'),

('P-1088', '249', '-130', '4', 'O-10006'),

('P-1090', '711', '-8', '4', 'O-10047'),

('P-1014', '496', '-79', '2', 'O-10021');

**JOIN QUERIES :-**

1. Show the Sub\_Category and their total sales amount for a specific date.

select distinct Sub\_Category,sum(Amount),orderd\_date

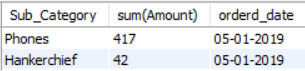
from Product\_Detail

JOIN Sales\_Detail on Product\_Detail.Prod\_ID=Sales\_Detail.Prod\_ID

JOIN Order\_details on Order\_details.order\_id=Sales\_Detail.order\_id

where orderd\_date = '05-01-2019'

group by Sub\_Category;



1. Display the customer names who have made more than FIVE purchases.

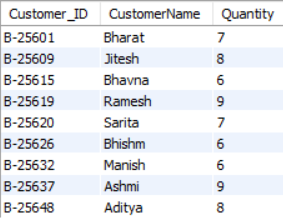
select Customer\_Detail.Customer\_ID,CustomerName, Quantity

from Customer\_Detail

JOIN Product\_Detail on Customer\_Detail.Customer\_ID=Product\_Detail.Customer\_ID

JOIN Sales\_Detail on Product\_Detail.Prod\_ID=Sales\_Detail.Prod\_ID

where Quantity>5;



1. List the products that have been ordered by more than one customer, along with the customer names who ordered them.

SELECT PD.Sub\_Category, COUNT(DISTINCT CD.Customer\_ID) AS NumCustomers, GROUP\_CONCAT(CD.CustomerName) AS CustomerNames

FROM Product\_Detail PD

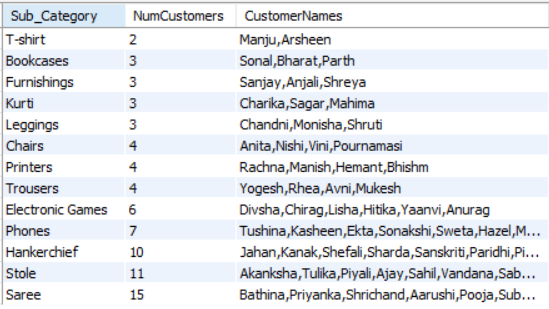
JOIN Sales\_Detail SD ON PD.Prod\_ID = SD.Prod\_ID

JOIN Order\_details OD ON SD.order\_id = OD.order\_id

JOIN Customer\_Detail CD ON OD.Customer\_ID = CD.Customer\_ID

GROUP BY PD.Sub\_Category

HAVING NumCustomers > 1 order by NumCustomers ASC;



1. List total profit and total sales with customer ID for Mumbai city

SELECT CD.Customer\_ID,

CD.CustomerName,

CD.City,

SUM(SD.Amount) AS TotalSales,

SUM(SD.Profit) AS TotalProfit

FROM Customer\_Detail CD

JOIN Product\_Detail PD ON CD.Customer\_ID = PD.Customer\_ID

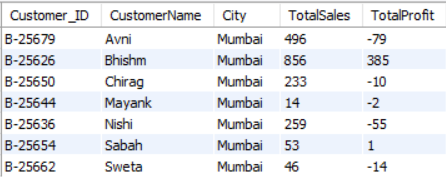
JOIN Order\_details OD ON PD.Order\_ID = OD.order\_id

JOIN Sales\_Detail SD ON PD.Prod\_ID = SD.Prod\_ID AND PD.Order\_ID = SD.order\_id

WHERE CD.City = 'Mumbai'

GROUP BY CD.Customer\_ID, CD.CustomerName, CD.City

ORDER BY CustomerName ASC;

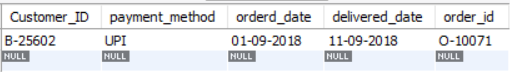


**SubQueries :-**

1. Retrieve the order IDs for orders placed by a specific customer.

SELECT \* FROM Order\_details

WHERE customer\_id = (SELECT customer\_id FROM Customer\_Detail WHERE CustomerName = 'Pearl');



1. Retrieve the product details for orders placed in a specific cities.

SELECT \*

FROM Product\_Detail

WHERE Order\_ID IN (SELECT Order\_ID FROM Order\_Details WHERE Customer\_ID IN (SELECT Customer\_ID FROM Customer\_Detail WHERE City = 'Pune' or City='Jaipur'));

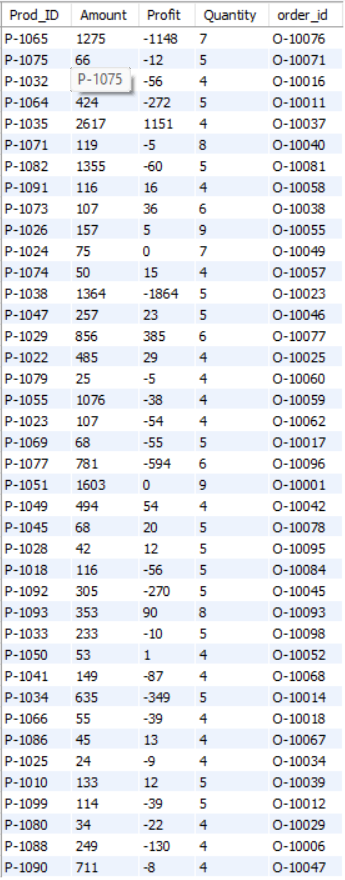


1. Find orders where the quantity sold is greater than the average quantity sold.

SELECT \*

FROM Sales\_Detail

WHERE Quantity > (SELECT AVG(Quantity) FROM Sales\_Detail);



1. Get the total quantity sold for a specific category.

SELECT SUM(Quantity)

FROM Sales\_Detail

WHERE Prod\_ID IN (SELECT Prod\_ID FROM Product\_Detail WHERE Category = 'Electronics');



1. Retrieve orders with the highest sales amount.

SELECT \*

FROM Sales\_Detail

WHERE Amount = (SELECT MAX(Amount) FROM Sales\_Detail);



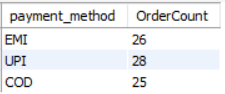
**OTHER QUERIES :-**

1. Calculate the total number of orders placed using each payment method.

SELECT payment\_method, COUNT(Order\_ID) AS OrderCount

FROM Order\_details

GROUP BY payment\_method;



1. Retrieve the orders with the highest total sales amount.

SELECT Order\_ID, SUM(Amount) AS TotalSales

FROM Sales\_Detail

GROUP BY Order\_ID

ORDER BY TotalSales DESC

LIMIT 1;

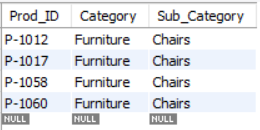


1. List the products with their corresponding categories and sub-categories.

SELECT Prod\_ID, Category, Sub\_Category

FROM Product\_Detail

where Category="Furniture" AND Sub\_Category="Chairs";



1. Retrieve the products in the 'Electronics' category.

SELECT \*

FROM Product\_Detail

WHERE Category = 'Electronics';



1. Find the average profit per order.

SELECT

AVG(Profit) AS AverageProfit\_or\_loss

FROM

Sales\_Detail;

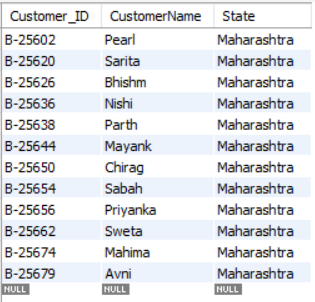


1. List Customers from Maharashtra

select Customer\_ID, CustomerName, State

from Customer\_Detail

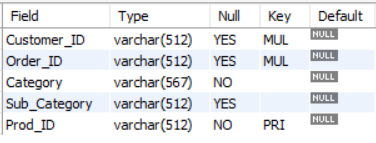
where State = 'Maharashtra';



1. Change row consrtraints to not null

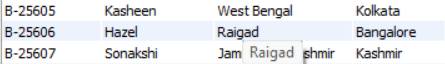
alter table Product\_Detail

modify Category varchar(567) not null;



1. Update state where specific customer\_id

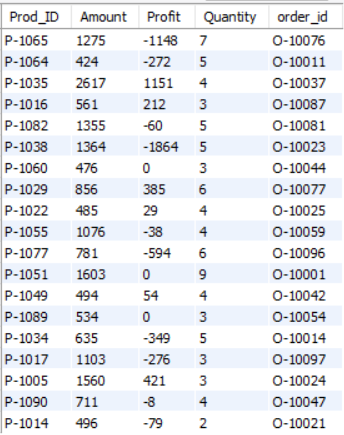
update Customer\_Detail

set state= "Raigad" where Customer\_ID='B-25606'; 

1. Show amount of product more than 400

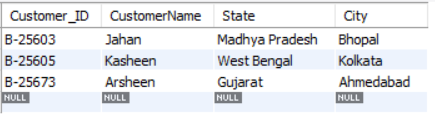
select \* from Sales\_Detail

where Amount > 400;



10) Show details where customer name is ending with "n"

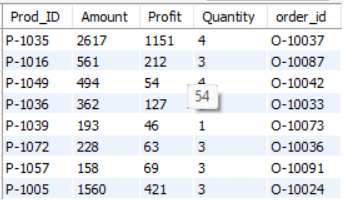
select \* from Customer\_Detail where CustomerName like "%n";



11) Show details where profit is not negative and quantity more than 5

select \* from Sales\_Detail

where Profit >=0 and Quantity < 5;

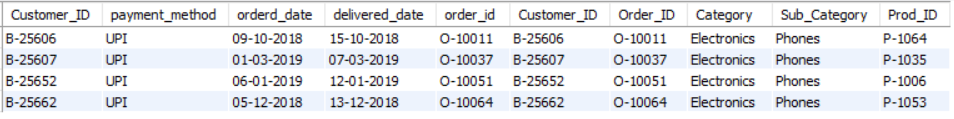


12) How many Customers Buy Phones on UPI

select \* from Order\_details

join Product\_Detail on Order\_details.Order\_ID=Product\_Detail.Order\_ID

where Payment\_Method = "UPI" and Sub\_Category="Phones";

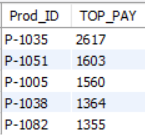


13) List top 5 max paid amount

SELECT Prod\_ID, Max(Amount) as TOP\_PAY FROM Sales\_Detail

GROUP BY Prod\_ID

ORDER BY TOP\_PAY DESC limit 5;



14) find Minimum profit in Negative with number of Quantities

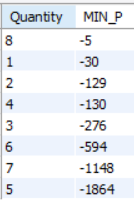
SELECT Quantity, MIN(Profit) as MIN\_P

FROM Sales\_Detail

GROUP BY Quantity

HAVING MIN\_P < 0

order by MIN\_P DESC;



**CONCLUSION :-**

Project successfully demonstrates the design and implementation of a relational database system for managing customer information, product details, order processing, and sales records. The structured schema and relationships between tables facilitate efficient data retrieval and maintain data integrity. This database can serve as a foundation for further development, incorporating additional features such as analytics, reporting, and scalability to meet the evolving needs of the business. As businesses grow, a robust database management system becomes increasingly vital for streamlining operations, optimizing decision-making processes, and enhancing overall efficiency.

**THANK YOU**