



Database Management System



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CSE 06707903

Contents

Introduction	2
Business Rules and User Requirements:.....	3
User Requirements:	4
ER Diagram.....	5
Identification of Entities:.....	5
Description of Entities:.....	5
Relationships:.....	7
SQL “Create Tables” and “Insert Rows” Script.....	8
Queries.....	16

Introduction

A company revolves around transactions, inventory, employees and, of course, its customers.

This database will keep detailed information about everything involved in everyday business.

Without a database, an organization would struggle with losing track of inventory,

inefficient transaction recording, missing customer information, and little to no employee sale records. With no proper inventory tracking employees cannot tell customers what is in stock or how many are left this can result in not only a frustrated customer but a loss in sales. It leaves employees helpless to properly perform their jobs. Businesses are also unable to properly record transaction histories so activities like returns or customers trying to remember what they bought in the past become much more difficult. Keeping track of past customer purchases also provides information about the customer so the business can tailor their notifications or advertisements for things that they would like. A database would also give businesses the tool to keep customer information such as an email address and phone number so they can communicate with their customers more frequently. Without a database, businesses are also unable to keep sale statistics on their employees. Know which employee is selling the most can give managers the opportunity to reward employees and train those who are not performing as well. Thus, making this a crucial tool for businesses, employee, and managers.

In conclusion, a database will be able to be used by employees, managers, and business owners and will provide them with the tools required in their job. It will increase sales.

Business Rules and User Requirements:

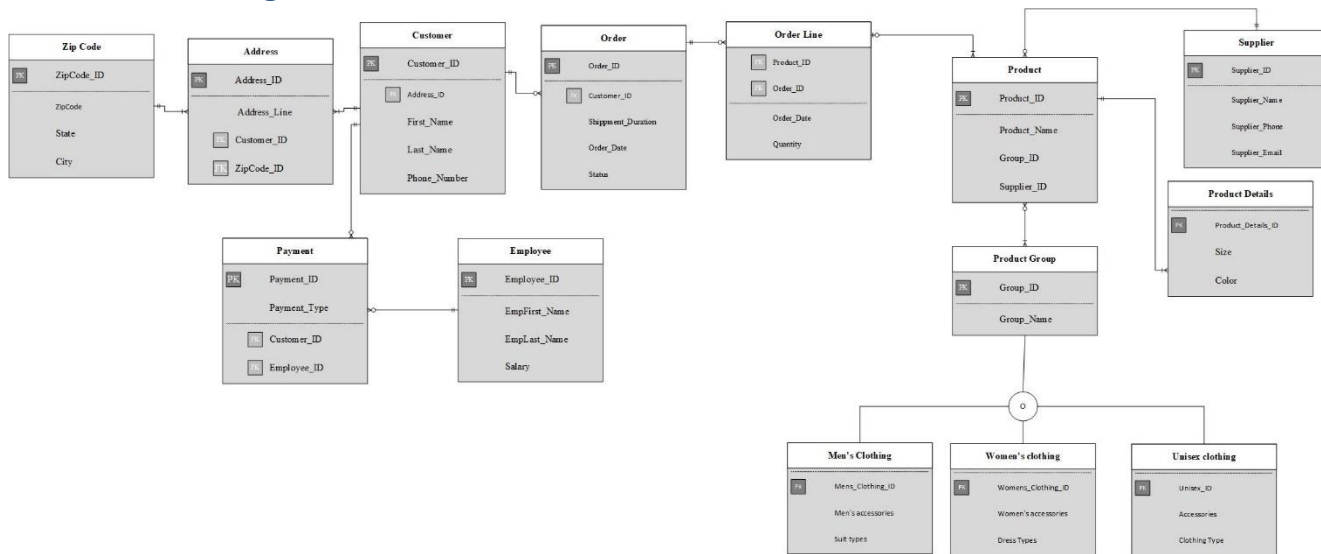
1. A Customer can have zero to many orders. An Order can have one and only one customer.
2. Every Customer is identified by its Customer ID. Customer first name, last name, and phone number are kept in the system for every customer.
3. Each Customer has zero to many Payment. A Payment belongs to one and only one Customer.
4. A Customer has one to many Address. Each Address belongs to one and only one Customer.
5. An Address is identified by Address ID and its Address line is kept in the system. Also, Customer ID and Zip Code ID are foreign key identifier.
6. An Address has one and only one Zip Code. Each Zip Code belongs to one to many Address.
7. Zip Code is identified by its Zip Code ID and its state and city are kept in the system.
8. A Payment is identified by its Payment ID and Payment Type. Customer ID and Employee ID are kept in the system for each Payment.
9. Payment of one and only one is processed by Employee. An employee can process zero to many Payment.
10. An Employee is identified by its Employee ID. Employee first name, last name, and salary are kept in the system for each Employee.
11. Each Order is identified by its Order ID. Shipment duration, order date, and status are kept in the system.
12. Each Order has zero to many Order Line. Every Order Line is associated with one and only one Order.
13. Order Line is identified by its Product ID and Order ID. Order Line date of order and quantities are kept in the system for every Order Line.
14. Every Order Line has one and only one Ordered Product. Each Ordered Product can have zero to many Order Line.
15. Ordered Product is identified by its Ordered Product ID. Ordered Product quantity, product price, and foreign key Product ID are kept in the system for each Ordered Product. Ordered Product has a foreign key identifier Product ID, which has relation with Product.
16. Each Ordered Product is a part of one and only one Product. A product can be part of zero to many Ordered Product.
17. A product is identified by its Product ID. Product name, group id, and supplier id are kept in the system for each Product.
18. A Product has one and only one supplier. A Supplier provides zero to many Products.
19. A Supplier is identified by its Supplier ID. Supplier name, phone number and email are kept in the system for each Supplier.

20. A Product has one or many Product Details. Every Product Details (size and color) has details of one only one Product.
21. Every Product is part of one and only Product Group. A Product Group has zero to many Product.
22. Product Group is identified by its Group ID. Group ID name is kept in the system for each Product Group.
23. A Product Group has two subtypes: Men's clothing and Women's Clothing.
24. Men's clothing keeps men's accessories and suits types in the system. For Women's clothing, women's accessories and dress types are kept in the system.

User Requirements:

1. A user can create a customer account.
2. A user can edit their personal profile with a new address or payment.
3. A user can create a new order.
4. A user can view order history.
5. A user can check order status.

ER Diagram



Identification of Entities:

- Employee
- Customer
- Address
- Zip Code
- Order
- Order Line
- Order Product
- Product
- Product Group
- Men's Clothing
- Women's Clothing
- Product Description
- Supplier

Description of Entities:

→ **Employee**-Any person who is employed as a part of the company staff. Attributes: EmployeeID, EmpFirst_Name, EmpLast_Name, Salary.

→ **Customer** -A person who buys products with cash or credit card. Attributes: CustomerID, First_Name, Last_Name, Phone_Number

→ **Address** -Address to with a particular order must be delivered. Attributes: AddressID, Address_line

→ **Zip Code** -Zip details of customers address is included. Attributes: ZipCode, City, State

→ **Payment**- This table holds payment and payment type. Attributes: Payment_ID, Payment_Type,

→ **Order** – This table hold the status of the order whether the order is delivered or not and the shipment option given by the customer. Attributes: Order_ID,Shippment_Duration, Order_Date, Status.

→ **Order Line** - OrderLine contains the details like date and quantity of items purchased. Attributes: Date of Order, Quantity

→ **Ordered Product**- This contains the details of quantity of product that customer ordered. Attributes: OrderProduct_ID, Quantity

→ **Product** -It is a form of good that is purchased by customer. Attributes: ProductID, Product_Name, Group_ID, Supplier_ID.

→ **Product Details** – Product details contains the description of particular product. Attributes: Size, Color

→ **Product Group** – Product group tells to which category the product belongs to. Attributes: Group_ID, Group_Name

Men's Clothing - Part of the Product group includes clothes that meant for men. Attributes: Men's accessories, Suit types

Women's Clothing - Part of the Product group includes clothes that meant for women. Attributes: Women's accessories, Dress Types

→ **Supplier**- Any person or entity that supplies products. Attributes: Supplier_ID, Supplier_Name, Supplier_Phone

Relationships:

Zip code is in the address

Customer will have an address

Customer places an order

Order contains order line

Order line lists ordered product

Product is supplied by a supplier

Product has product details

Product belongs to a group

Product group can be men's or women's clothing

Customer makes a payment

Employee processes a payment

SQL “Create Tables” and “Insert Rows” Script

```
CREATE TABLE "AZIPCODE"  
  ("ZIPCODE_ID" NUMBER,  
  "ZIPCODE" NUMBER,  
  "STATE" VARCHAR2(30),  
  "CITY" VARCHAR2(30),  
  CONSTRAINT "AZIPCODE_PK" PRIMARY KEY ("ZIPCODE_ID")  
  USING INDEX ENABLE)
```

```
Insert into AZIPCODE (ZIPCODE_ID, ZIPCODE, STATE, CITY) VALUES (1, '23230', 'VA', 'Richmond');
```

```
Insert into AZIPCODE (ZIPCODE_ID, ZIPCODE, STATE, CITY) VALUES (2, '23047', 'VA', 'Doswell');
```

```
Insert into AZIPCODE (ZIPCODE_ID, ZIPCODE, STATE, CITY) VALUES (3, '27858', 'NC', 'Greenville');
```

```
CREATE TABLE "AADDRESS"  
  ("ADDRESS_ID" NUMBER,  
  "ADDRESS_LINE" VARCHAR2(30),  
  "CUSTOMER_ID" NUMBER,  
  "ZIPCODE_ID" NUMBER,  
  CONSTRAINT "AADDRESS_PK" PRIMARY KEY ("ADDRESS_ID")  
  USING INDEX ENABLE  
  )
```

```
Insert into AADDRESS (Address_ID, Address_Line, Customer_ID, ZipCode_ID) VALUES (1, '3408 W Moore St', 1, 1);
```

```
Insert into AADDRESS (Address_ID, Address_Line, Customer_ID, ZipCode_ID) VALUES (2, '14211 Tower Rd', 2, 2);
```

```
Insert into AADDRESS (Address_ID, Address_Line, Customer_ID, ZipCode_ID) VALUES (3, '507 Evans St', 3, 3);
```

```
CREATE TABLE "APAYMENT"
```

```
("PAYMENT_ID" NUMBER,  
"PAYMENT_TYPE" VARCHAR2(30),  
"CUSTOMER_ID" NUMBER,  
"EMPLOYEE_ID" NUMBER,  
CONSTRAINT "APAYMENT_PK" PRIMARY KEY ("PAYMENT_ID")  
USING INDEX ENABLE  
)
```

```
Insert into APAYMENT (Payment_ID, Payment_Type, Customer_ID, Employee_ID) VALUES (1, 'Credit', 1,  
1);
```

```
Insert into APAYMENT (Payment_ID, Payment_Type, Customer_ID, Employee_ID) VALUES (2, 'Cash', 2,  
2);
```

```
Insert into APAYMENT (Payment_ID, Payment_Type, Customer_ID, Employee_ID) VALUES (3, 'Venmo',  
3, 3);
```

```
Insert into APAYMENT (Payment_ID, Payment_Type, Customer_ID, Employee_ID) VALUES (4, 'Apple  
Pay', 4, 4);
```

```
Insert into APAYMENT (Payment_ID, Payment_Type, Customer_ID, Employee_ID) VALUES (5, 'Debit', 5,  
5);
```

```
Insert into APAYMENT (Payment_ID, Payment_Type, Customer_ID, Employee_ID) VALUES (6, 'Check', 6,  
6);
```

```
CREATE TABLE "ACUSTOMER"
```

```
("CUSTOMER_ID" NUMBER,  
"FIRST_NAME" VARCHAR2(30),  
"LAST_NAME" VARCHAR2(30),  
"PHONE_NUMBER" NUMBER,  
"ADDRESS_ID" NUMBER,  
CONSTRAINT "ACUSTOMER_PK" PRIMARY KEY ("CUSTOMER_ID")  
USING INDEX ENABLE  
)
```

Insert into ACUSTOMER (Customer_ID, First_Name, Last_Name, Phone_Number) VALUES (1, 'John', 'Smith', 8043565122);

Insert into ACUSTOMER (Customer_ID, First_Name, Last_Name, Phone_Number) VALUES (2, 'Tracy', 'Adams', 8046987564);

Insert into ACUSTOMER (Customer_ID, First_Name, Last_Name, Phone_Number) VALUES (3, 'Mark', 'Brown', 2526544891);

CREATE TABLE "AEMPLOYEE"

```
("EMPLOYEE_ID" NUMBER,  
"EMPFIRST_NAME" VARCHAR2(30),  
"EMPLAST_NAME" VARCHAR2(30),  
"SALARY" NUMBER,  
CONSTRAINT "AEMPLOYEE_PK" PRIMARY KEY ("EMPLOYEE_ID")  
USING INDEX ENABLE  
)
```

Insert into AEMPLOYEE (Employee_ID, EmpFirst_name, EmpLastName, Salary) VALUES (1, 'Richard', 'Tozer', 30125);

Insert into AEMPLOYEE (Employee_ID, EmpFirst_name, EmpLastName, Salary) VALUES (2, 'Ashley', 'Nixon', 25890);

Insert into AEMPLOYEE (Employee_ID, EmpFirst_name, EmpLastName, Salary) VALUES (3, 'Sarah', 'Johnson', 32540);

CREATE TABLE "AORDER"

```
("ORDER_ID" NUMBER,  
"CUSTOMER_ID" NUMBER,  
"SHIPMENT_DURATION" NUMBER,  
"ORDER_DATE" VARCHAR2(30),  
"STATUS" VARCHAR2(30),  
CONSTRAINT "AORDER_PK" PRIMARY KEY ("ORDER_ID")  
USING INDEX ENABLE
```

)

Insert into AORDER (Order_ID, Customer_ID, Shippment_Duration, Order_Date, Status) VALUES (1, 1, 3, TO_DATE ('2019/02/15', 'yyyy/mm/dd'), Shipped);

Insert into AORDER (Order_ID, Customer_ID, Shippment_Duration, Order_Date, Status) VALUES (2, 2, 5, TO_DATE ('2019/03/07', 'yyyy/mm/dd'), Pending);

Insert into AORDER (Order_ID, Customer_ID, Shippment_Duration, Order_Date, Status) VALUES (3, 3, 7, TO_DATE ('2019/03/18', 'yyyy/mm/dd'), Pending);

CREATE TABLE "AORDER_LINE"

("PRODUCT_ID" NUMBER,

"ORDER_ID" NUMBER,

"ORDER_DATE" VARCHAR2(30),

"QUANTITY" NUMBER,

CONSTRAINT "AORDER_LINE_PK" PRIMARY KEY ("PRODUCT_ID")

USING INDEX ENABLE

)

INSERT INTO AORDER_LINE (PRODUCT_ID, ORDER_ID, ORDER_DATE, QUANTITY)

VALUES (1, 1, TO_DATE ('2019/02/15', 'yyyy/mm/dd'), 2);

INSERT INTO AORDER_LINE (PRODUCT_ID, ORDER_ID, ORDER_DATE, QUANTITY)

VALUES (2, 2, TO_DATE ('2019/03/07', 'yyyy/mm/dd'), 4);

INSERT INTO AORDER_LINE (PRODUCT_ID, ORDER_ID, ORDER_DATE, QUANTITY)

VALUES (3, 3, TO_DATE ('2019/03/07', 'yyyy/mm/dd'), 6);

CREATE TABLE "AMENSCLOTHING"

("MENSCLOTHING_ID" NUMBER,

"MENS_ACCESSORIES" VARCHAR2(30),

```
"SUIT_TYPES" VARCHAR2(30),  
    CONSTRAINT "MEN'SCLOTHING_PK" PRIMARY KEY ("MENSCLCLOTHING_ID")  
    USING INDEX ENABLE  
);
```

Insert into AMENSCLOTHING (men'sClothing_ID,Men's_Accessories,Suit_Types) VALUES (1,Watches,
Tuxedo);

Insert into AMENSCLOTHING (men'sClothing_ID,Men's_Accessories,Suit_Types) VALUES (2,Glasses,
Wedding);

Insert into AMENSCLOTHING (men'sClothing_ID,Men's_Accessories,Suit_Types) VALUES (3,Headbands,
Lounge);

```
CREATE TABLE "APRODUCT"  
( "PRODUCT_ID" NUMBER,  
  "PRODUCT_NAME" VARCHAR2(30),  
  "GROUP_ID" NUMBER,  
  "SUPPLIER_ID" NUMBER,  
  CONSTRAINT "1PRODUCT_PK" PRIMARY KEY ("PRODUCT_ID")  
  USING INDEX ENABLE  
);
```

Insert into APRODUCT (Product_ID,Product_Name,Supplier_ID) VALUES (1,T-shirt, 1);

Insert into APRODUCT (Product_ID,Product_Name,Supplier_ID) VALUES (2,Shoes, 2);

Insert into APRODUCT (Product_ID,Product_Name,Supplier_ID) VALUES (3,Glasses, 3);

```
CREATE TABLE "APRODUCTDETAIL"  
( "PRODUCTDETAIL_ID" NUMBER,  
  "1SIZE" VARCHAR2(30),
```

```
"COLOR" VARCHAR2(30),  
    CONSTRAINT "1PRODUCTDETAIL_PK" PRIMARY KEY ("PRODUCTDETAIL_ID")  
    USING INDEX ENABLE  
);
```

```
Insert into APRODUCTDETAIL (ProductDetail_ID,1Size,Color) VALUES (1,M, Blue);  
Insert into APRODUCTDETAIL (ProductDetail_ID,1Size,Color) VALUES (2,L, White);  
Insert into APRODUCTDETAIL (ProductDetail_ID,1Size,Color) VALUES (3,XL, Black);
```

```
CREATE TABLE "APRODUCTGROUP"  
( "GROUP_ID" NUMBER,  
  "GROUP_NAME" VARCHAR2(30),  
  CONSTRAINT "1PRODUCTGROUP_PK" PRIMARY KEY ("GROUP_ID")  
  USING INDEX ENABLE  
);
```

```
Insert into APRODUCTGROUP (Group_ID,Group_Name) VALUES (1,Men's);  
Insert into APRODUCTGROUP (Group_ID,Group_Name) VALUES (2,Women's);  
Insert into APRODUCTGROUP (Group_ID,Group_Name) VALUES (3,Unisex);
```

```
CREATE TABLE "AUNISEX"  
( "UNISEX_ID" NUMBER,  
  "ACCESSORIES" VARCHAR2(30),  
  "CLOTHING_TYPE" VARCHAR2(30),  
  CONSTRAINT "1UNISEX_PK" PRIMARY KEY ("UNISEX_ID")  
  USING INDEX ENABLE  
);
```

```
Insert into AUNISEX (Unisex_ID,Accessories,Clothing_Type) VALUES (1,Hats, Pants);
Insert into AUNISEX (Unisex_ID,Accessories,Clothing_Type) VALUES (2,Belts, Shirts);
Insert into AUNISEX (Unisex_ID,Accessories,Clothing_Type) VALUES (3,watches, Shoes);
```

```
CREATE TABLE "AWOMENSCLOTHING"
(  "WOMENSCLOTHING_ID" NUMBER,
  "WOMENS_ACCESSORIES" VARCHAR2(30),
  "DRESS_TYPES" VARCHAR2(30),
  CONSTRAINT "1WOMEN'SCLOTHING_PK" PRIMARY KEY ("WOMENSCLOTHING_ID")
  USING INDEX  ENABLE
);
```

```
Insert into AWOMENSCLOTHING (Women'sClothing_ID,Women's_Accessories,Dress_Types) VALUES
(1,Glasses, Slip);
```

```
Insert into AWOMENSCLOTHING (Women'sClothing_ID,Women's_Accessories,Dress_Types) VALUES
(2,Belts, Party);
```

```
Insert into AWOMENSCLOTHING (Women'sClothing_ID,Women's_Accessories,Dress_Types) VALUES
(3,Bows, Gown);
```


```
CREATE TABLE "ASUPPLIER"
(  "SUPPLIER_ID" NUMBER,
  "SUPPLIER_NAME" VARCHAR2(30),
  "SUPPLIER_PHONE" NUMBER,
  "SUPPLIER_EMAIL" VARCHAR2(30),
  CONSTRAINT "1SUPPLIER_PK" PRIMARY KEY ("SUPPLIER_ID")
  USING INDEX  ENABLE
);
```

Insert into ASUPPLIER (Supplier_ID,Supplier_Name,Supplier_Phone,Supplier_email) VALUES (1,Walmart,
804352221, wal@walmart.com);

Insert into ASUPPLIER (Supplier_ID,Supplier_Name,Supplier_Phone,Supplier_email) VALUES (2,Target,
7032551666, tar@target.com);

Insert into ASUPPLIER (Supplier_ID,Supplier_Name,Supplier_Phone,Supplier_email) VALUES (3,BestBuy,
8045552544, Best@bestbuy.com);

Queries


☒ Autocommit Rows  Save Run

```
SELECT FIRST_NAME, LAST_NAME
FROM ACUSTOMER;
```

Results Explain Describe Saved SQL History

FIRST_NAME	LAST_NAME
Beth	Morgan
Elena	Sheldon
Seth	Ferall
Sarah	Davis
John	Howard
Robert	Peters
Elizabeth	McGuier
John	Smith
Tracy	Adams
Mark	Brown

10 rows returned in 0.01 seconds [Download](#)

☒ Autocommit Rows  Save Run

```
SELECT ADDRESS_LINE
FROM ADDRESS;
```

Results Explain Describe Saved SQL History

ADDRESS_LINE
7389 Broad Street
7390 Main Street
84830 Harvard Lane
7134 Mills
9034 Eubank
3408 W Moore St
14211 Tower Rd
507 Evans St
126 Mount Road
8276 R C Gorman

10 rows returned in 0.01 seconds [Download](#)

```
SELECT EMPFIRST_NAME, EMPLAST_NAME  
FROM AEMPLOYEE;
```

Results Explain Describe Saved SQL History

EMPFIRST_NAME	EMPLAST_NAME
Richard	Tozer
Ashley	Nixon
Taylor	Mathes

3 rows returned in 0.00 seconds [Download](#)

```
SELECT EMPFIRST_NAME, EMPLAST_NAME, SALARY  
FROM AEMPLOYEE;
```

Results Explain Describe Saved SQL History

EMPFIRST_NAME	EMPLAST_NAME	SALARY
Richard	Tozer	30125
Ashley	Nixon	25890
Taylor	Mathes	32540

3 rows returned in 0.01 seconds [Download](#)

```
SELECT PRODUCT_NAME  
FROM APRODUCT;
```

Results Explain Describe Saved SQL Histo

PRODUCT_NAME
T-shirt
Shoes
Glasses

3 rows returned in 0.00 seconds

[Download](#)

```
SELECT FIRST_NAME, LAST_NAME
FROM ACUSTOMER AA, AADDRESS BB, AZIPCODE CC
WHERE AA.CUSTOMER_ID = BB.CUSTOMER_ID
AND BB.ZIPCODE_ID = CC.ZIPCODE_ID
AND CC.ZIPCODE = 23047;|
```

Results Explain Describe Saved SQL Hist

FIRST_NAME	LAST_NAME
Tracy	Adams

1 rows returned in 0.01 seconds

[Download](#)

```
SELECT first_name, last_name
FROM ACUSTOMER AA, AADDRESS BB
WHERE AA.CUSTOMER_ID = BB.CUSTOMER_ID|
AND BB.ZIPCODE_ID = 3;
```

Results Explain Describe Saved SQL Histor

FIRST_NAME	LAST_NAME
Mark	Brown

1 rows returned in 0.00 seconds

[Download](#)

```
SELECT first_name, last_name
FROM ACUSTOMER AA, AADDRESS BB, AZIPCODE CC
WHERE AA.CUSTOMER_ID = BB.CUSTOMER_ID
AND BB.ZIPCODE_ID = CC.ZIPCODE_ID
AND CC.ZIPCODE = 23230;
```

Results Explain Describe Saved SQL History

FIRST_NAME	LAST_NAME
John	Smith

1 rows returned in 0.00 seconds

[Download](#)

```
SELECT STATE, CITY, ZIPCODE
FROM ACUSTOMER AA, AADDRESS BB, AZIPCODE CC
WHERE AA.CUSTOMER_ID = BB.CUSTOMER_ID
AND BB.ZIPCODE_ID = CC.ZIPCODE_ID
AND CC.ZIPCODE = 23047;
```

Results Explain Describe Saved SQL History

STATE	CITY	ZIPCODE
VA	Doswell	23047

1 rows returned in 0.00 seconds

[Download](#)

```

SELECT FIRST_NAME, LAST_NAME, STATE, CITY, ZIPCODE
FROM ACUSTOMER AA, AADDRESS BB, AZIPCODE CC
WHERE AA.CUSTOMER_ID = BB.CUSTOMER_ID AND BB.ZIPCODE_ID = CC.ZIPCODE

```

Results Explain Describe Saved SQL History

FIRST_NAME	LAST_NAME	STATE	CITY	ZIPCODE
Beth	Morgan	CO	Denver	80201
Elena	Sheldon	FL	Pensacola	32501
Seth	Ferall	FL	Pensacola	60601
Robert	Peters	CA	Sacramento	94203
Elizabeth	McGuier	AZ	Pheonix	85001
John	Smith	VA	Richmond	23230
Tracy	Adams	VA	Doswell	23047
Mark	Brown	NC	Greenville	27858
Sarah	Davis	NM	Albuquerque	87122
John	Howard	AR	Anchorage	99501

10 rows returned in 0.00 seconds Download

```

SELECT FIRST_NAME, LAST_NAME, ADDRESS_LINE, PHONE_NUMBER
FROM ACUSTOMER AA, AADDRESS BB, AZIPCODE CC
WHERE AA.CUSTOMER_ID = BB.CUSTOMER_ID AND BB.ZIPCODE_ID = CC.ZIPCODE_ID;

```

[Results](#)
[Explain](#)
[Describe](#)
[Saved SQL](#)
[History](#)

FIRST_NAME	LAST_NAME	ADDRESS_LINE	PHONE_NUMBER
Beth	Morgan	7389 Broad Street	2738933847
Elena	Sheldon	7390 Main Street	7394821843
Seth	Ferall	84830 Harvard Lane	8399562376
Robert	Peters	7134 Mills	4323467432
Elizabeth	McGuier	9034 Eubank	8372345937
John	Smith	3408 W Moore St	8043565122
Tracy	Adams	14211 Tower Rd	8046987564
Mark	Brown	507 Evans St	2526544891
Sarah	Davis	126 Mount Road	6453246543
John	Howard	8276 R C Gorman	8934029834

```
SELECT FIRST_NAME, LAST_NAME, ORDER_DATE  
FROM ACUSTOMER AA, AORDER BB  
WHERE AA.CUSTOMER_ID = BB.ORDER_ID;
```

Results Explain Describe Saved SQL History

FIRST_NAME	LAST_NAME	ORDER_DATE
John	Smith	02/15/2019
Tracy	Adams	03/07/2019
Mark	Brown	03/18/2019

3 rows returned in 0.00 seconds

[Download](#)


```
SELECT FIRST_NAME, LAST_NAME, ORDER_DATE, STATUS|
FROM ACUSTOMER AA, AORDER BB
WHERE AA.CUSTOMER_ID = BB.ORDER_ID;
```

Results Explain Describe Saved SQL History

FIRST_NAME	LAST_NAME	ORDER_DATE	STATUS
John	Smith	02/15/2019	Shipped
Tracy	Adams	03/07/2019	Shipped
Mark	Brown	03/18/2019	Pending

3 rows returned in 0.01 seconds [Download](#)

```
SELECT FIRST_NAME, LAST_NAME, PAYMENT_TYPE|
FROM ACUSTOMER AA, APAYMENT BB
WHERE AA.CUSTOMER_ID = BB.CUSTOMER_ID;
```

Results Explain Describe Saved SQL History

FIRST_NAME	LAST_NAME	PAYMENT_TYPE
John	Smith	Check
Tracy	Adams	Debit
Tracy	Adams	ApplePay
John	Smith	Credit
Tracy	Adams	Cash
Mark	Brown	Venmo

6 rows returned in 0.01 seconds [Download](#)

```
SELECT FIRST_NAME, LAST_NAME, PRODUCT_NAME
FROM ACUSTOMER AA, AORDER BB, AORDER_LINE CC, APRODUCT DD
WHERE AA.CUSTOMER_ID = BB.ORDER_ID AND
BB.ORDER_ID = CC.ORDER_ID AND CC.PRODUCT_ID = DD.PRODUCT_ID;
```

Results Explain Describe Saved SQL History

FIRST_NAME	LAST_NAME	PRODUCT_NAME
John	Smith	T-shirt
Tracy	Adams	Shoes
Mark	Brown	Glasses

3 rows returned in 0.01 seconds [Download](#)

```
SELECT FIRST_NAME, LAST_NAME, PRODUCT_NAME, QUANTITY
FROM ACUSTOMER AA, AORDER BB, AORDER_LINE CC, APRODUCT DD
WHERE AA.CUSTOMER_ID = BB.ORDER_ID AND
BB.ORDER_ID = CC.ORDER_ID AND CC.PRODUCT_ID = DD.PRODUCT_ID;
```

Results Explain Describe Saved SQL History

FIRST_NAME	LAST_NAME	PRODUCT_NAME	QUANTITY
John	Smith	T-shirt	2
Tracy	Adams	Shoes	4
Mark	Brown	Glasses	6

3 rows returned in 0.01 seconds [Download](#)

```
SELECT PRODUCT_NAME, SUPPLIER_NAME, SUPPLIER_PHONE  
FROM APRODUCT AA, ASUPPLIER BB  
WHERE AA.SUPPLIER_ID = BB.SUPPLIER_ID;
```

Results Explain Describe Saved SQL History

PRODUCT_NAME	SUPPLIER_NAME	SUPPLIER_PHONE
T-shirt	Walmart	804352221
Shoes	Target	7032551666
Glasses	BestBuy	8045552544

3 rows returned in 0.00 seconds [Download](#)

```

SELECT PRODUCT_NAME, GROUP_NAME
FROM APRODUCTGROUP AA, APRODUCT BB
WHERE AA.GROUP_ID = BB.GROUP_ID;

```

Results Explain Describe Saved SQL History

PRODUCT_NAME	GROUP_NAME
T-shirt	Men's
Shoes	Women's
Glasses	Unisex

3 rows returned in 0.00 seconds

[Download](#)

```

SELECT FIRST_NAME, LAST_NAME, ORDER_DATE, STATUS, SHIPMENT_DURATION
FROM ACUSTOMER AA, AORDER BB
WHERE AA.CUSTOMER_ID = BB.CUSTOMER_ID;

```

Results Explain Describe Saved SQL History

FIRST_NAME	LAST_NAME	ORDER_DATE	STATUS	SHIPMENT_DURATION
John	Smith	02/15/2019	Shipped	3
Tracy	Adams	03/07/2019	Shipped	5
Mark	Brown	03/18/2019	Pending	7

3 rows returned in 0.00 seconds

[Download](#)

```

SELECT EMPFIRST_NAME, EMPLAST_NAME, FIRST_NAME, LAST_NAME, PAYMENT_TYPE
FROM AEMPLOYEE AA, APAYMENT BB, ACUSTOMER CC
WHERE AA.EMPLOYEE_ID = BB.EMPLOYEE_ID AND CC.CUSTOMER_ID = BB.CUSTOMER_ID;

```

Results Explain Describe Saved SQL History

EMPFIRST_NAME	EMPLAST_NAME	FIRST_NAME	LAST_NAME	PAYMENT_TYPE
Richard	Tozer	John	Smith	Credit
Ashley	Nixon	Tracy	Adams	Cash
Taylor	Mathes	Mark	Brown	Venmo

3 rows returned in 0.00 seconds

[Download](#)

```

SELECT FIRST_NAME, LAST_NAME
FROM ACUSTOMER AA, ADDRESS BB
WHERE AA.CUSTOMER_ID = BB.CUSTOMER_ID
AND BB.ZIPCODE_ID = 3;

```

Results Explain Describe Saved SQL

FIRST_NAME	LAST_NAME
Mark	Brown

1 rows returned in 0.01 seconds

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```
SELECT FIRST_NAME, LAST_NAME
FROM ACUSTOMER AA, AADDRESS BB, AZIPCODE CC
WHERE AA.CUSTOMER_ID = BB.CUSTOMER_ID
AND BB.ZIPCODE_ID = CC.ZIPCODE_ID
AND CC.ZIPCODE = 23230
;
```

Results Explain Describe Saved SQL History

FIRST_NAME	LAST_NAME
John	Smith

1 rows returned in 0.01 seconds

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