



**Brewed Coffee**  
**Database Managed Coffee Shop**

## Company Description:

Brewed Coffee Shop is a charming, small beverage shop designed to provide a cozy and welcoming environment for customers who want to relax, study, or spend time with friends. With a warm atmosphere and friendly service, Brewed Coffee Shop has become the perfect place to unwind or be productive while enjoying a delicious drink or treat. Whether you're stopping by for a quick caffeine boost or settling in for a leisurely afternoon, our shop offers something for everyone.

At Brewed Coffee Shop, we take great pride in our diverse selection of drinks, making sure to cater to a variety of tastes and preferences. For those who enjoy a rich and bold espresso, we offer an array of options. Our Americano provides a simple yet satisfying flavor, while the Café Mocha blends the rich taste of espresso with chocolate for a sweet, indulgent experience. The Café Latte is a classic favorite, smooth and creamy, perfect for those who prefer a milder coffee. For something a little more unique, we feature our Sea Salt Coffee, a delightful twist on the traditional coffee experience with a savory touch that's sure to please.

Tea lovers will also find plenty of options to enjoy at Brewed Coffee Shop. Our Milk Tea is a popular choice, offering a smooth, comforting drink that pairs wonderfully with our pastries. If you're in the mood for something cooler, the Matcha Ice Blended provides a refreshing and slightly earthy flavor, ideal for hot days. The Yuzu Omiya, with its citrusy zest, offers a bright and refreshing alternative, while our Hojicha tea, roasted to perfection, provides a comforting, aromatic flavor that is perfect for any time of day.

To accompany these delightful beverages, we offer a selection of cakes and desserts that are the perfect complement to your drink. Our Cheesecakes are a customer favorite—rich, creamy, and with just the right balance of sweetness. If you're in the mood for something light and delicate, our Crepes, with their thin, melt-in-your-mouth texture, will hit the spot. And for those who enjoy a more indulgent treat, our Tarts come in a variety of flavors, offering a crisp, buttery base topped with decadent fillings.

Brewed Coffee Shop isn't just a place to grab a drink—it's a place to gather, relax, and enjoy a comfortable atmosphere. Whether you're meeting friends for a catch-up, working on a project, or simply treating yourself, our goal is to make every visit a memorable experience. From the inviting ambiance to the carefully crafted beverages and desserts, we strive to create a space where every customer feels at home. We look forward to welcoming you to Brewed Coffee Shop and sharing our passion for great coffee, tea, and treats!

## Problem Definition:

Brewed Coffee Shop is currently under repair and plans to open at the end of this year. Thus, we need a system to help our business work smoothly. Currently, the establishment faces the following challenges:

### *1. Order Management:*

- In order for employees to efficiently manage each customer order. When an order is placed, it will be immediately recorded in a database, allowing workers to view the order details and follow them to prepare the drink.
- Through the order record, the shop can also ensure customers receive reward point

### *2. Inventory management:*

- Monitoring the stock level of ingredients and toppings so that it avoids any unnecessary shortages or over stock.

### *3. Menu Management:*

- Since the business has many kinds of items and drinks, it needs a structured system to organize all items on the menu and set the price or edit new prices when needed.

### *4. Payment processing problem:*

- Customers will pay for their orders using multiple methods. Without a database, tracking transaction records becomes difficult. Therefore, the store seeks a system that securely logs payments and links them to specific orders and customers.

### *5. Manage Customer and tracking customer loyalty:*

- Brewed Coffee can save customers information so that it reminds consumers of promotions, upcoming events or new menu items.
- Customers can also accumulate their loyalty points after each order, and in which Brewed Coffee offers redeemable rewards.

### *6. Worker Management:*

- Brewed Coffee Shop needs a system that can hold worker information, their roles, schedule working shifts, and time cards.
- The system should allow tracking of employee performance and time off requests.
- Along with updating worker details, such as contact information and role changes.

**Supporting Document: None**

# Conceptual Database Design:

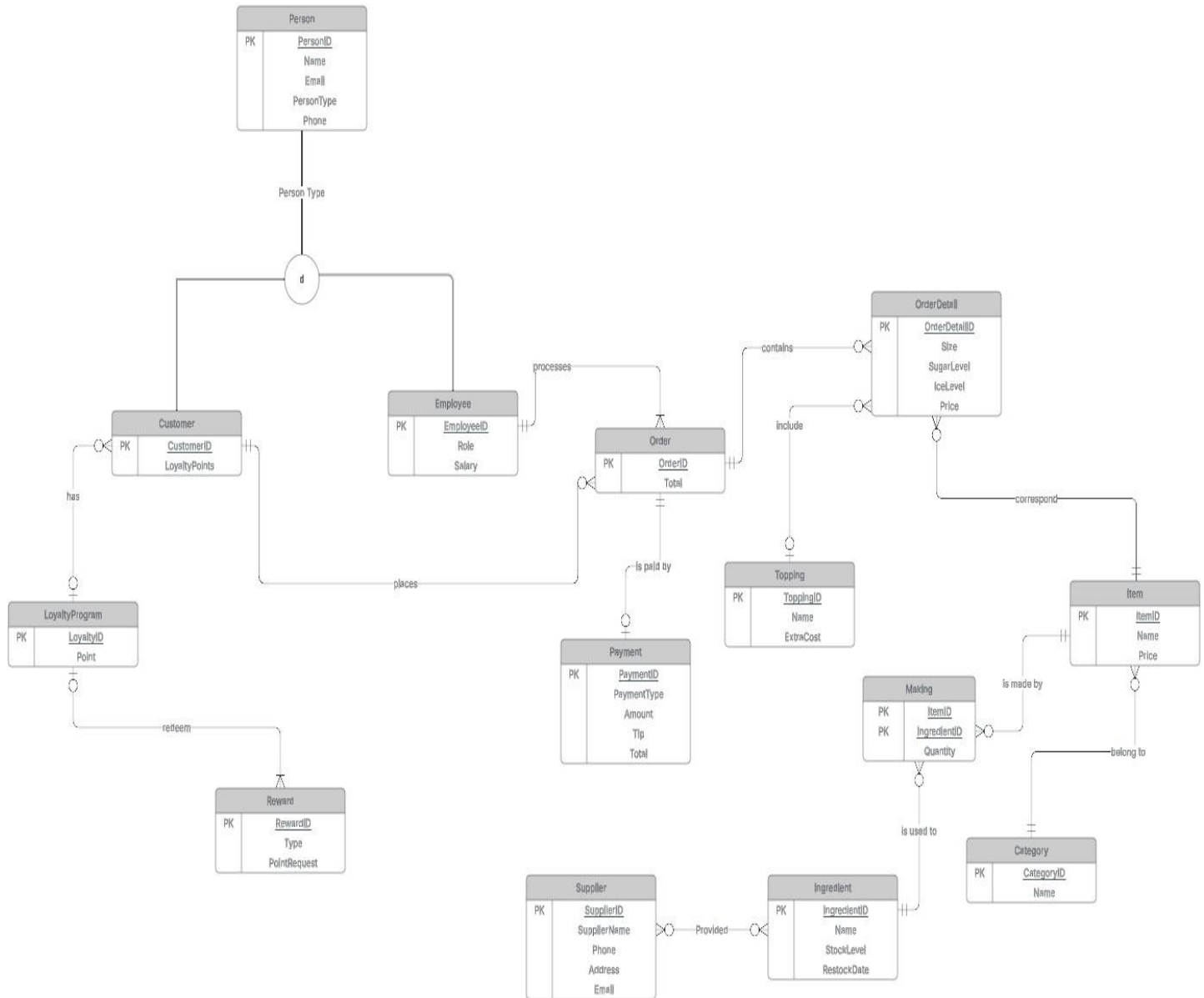
## Database include 13 entities:

- Person (supertype): **personID**, Name, Email, Phone, personType
- Customer (subtype of person): Participates in orders and loyalty programs. Discriminator: PersonType = 'Customer'. Attributes (LoyaltyPoints)
- Employee (subtype of person): Handles transactions and shop operations. Discriminator: PersonType = 'Employee'. Attribute (Role, Salary)
- Rewards (**RewardID**, Type, PointRequest)
- LoyaltyProgram (**LoyaltyID**, Points)
- Order (**OrderID**, Total)
- OrderDetail (**OrderDetailID**, Size, SugarLevel, IceLevel, Price)
- Payment (**PaymentID**, PaymentType, Amount, Tips, Total)
- Item (**ItemID**, Name, Price)
- Category (**CategoryID**, Name)
- Topping (**ToppingID**, Name, ExtraCost)
- Making (**ItemID**, **IngredientID**, Quantity)
- Ingredient (**IngredientID**, Name, StockLevel, RestockDate)
- Supplier (**SupplierID**, SupplierName, Phone, Address, Email)

## Description Relationships:

- Person → Customer, Employee: Disjoint and complete specialization. A Person is either a Customer or Employee, but not both.
- Customer (0..1) ↔ (0..\*) LoyaltyProgram: A customer may or may not be in a program. A loyalty program can have multiple customers.
- LoyaltyProgram (1..\*) ↔ (0..1) Reward: A loyalty program can offer multiple rewards, and a reward can belong to multiple programs.
- Customer (0..\*) ↔ (1..1) Order: A customer may place zero or many orders.
- Order (0..1) ↔ (1..1) Payment: An order may or may not have been paid yet.
- Order (0..\*) ↔ (1..1) OrderDetail: Each order detail is linked to exactly one order.
- OrderDetail (1..1) ↔ (0..\*) Item: Each order detail has exactly one item; each item may appear in multiple order details.
- Item (0..\*) ↔ (0..\*) Ingredient via Making: Many-to-many relationship; an item may contain many ingredients and vice versa.
- Category (0..1) ↔ (0..\*) Item: Items may optionally be grouped into categories.
- Ingredient (0..\*) ↔ (0..\*) Supplier: Ingredients can be supplied by multiple suppliers and vice versa.

## Conceptual EERD



# Logical Database Design:

**Person:** (PersonID, Name, Email, Phone, personType)

PRIMARY KEY: PersonID

**Customer:** (CustomerID, LoyalPoints)

PRIMARY KEY: CustomerID

FOREIGN KEY: PersonID REFERENCES Person

**Employee:** (EmployeeID, Role, salary)

PRIMARY KEY: EmployeeID

FOREIGN KEY: EmployeeID REFERENCES Person

**Reward** (RewardID, Type, PointRequest)

PRIMARY KEY: RewardID

**LoyaltyProgram** (LoyaltyID, Points, CustomerID, RewardID)

PRIMARY KEY: LoyaltyID

FOREIGN KEY: CustomerID REFERENCES Customer

FOREIGN KEY: RewardID REFERENCES Reward

**Order** (OrderID, Total, CustomerID, EmployID)

PRIMARY KEY: OrderID

FOREIGN KEY: CustomerID REFERENCES Customer

FOREIGN KEY: EmployeeID REFERENCES Employee

**OrderDetail** (OrderDetailID, Size, SugarLevel, IceLevel, Price, OrderID, ItemID, ToppingID)

PRIMARY KEY: OrderDetailID

FOREIGN KEY: OrderID REFERENCES Order

FOREIGN KEY: ItemID REFERENCES Item

FOREIGN KEY: ToppingID REFERENCES Topping

**Payment** (PaymentID, PaymentType, Amount, Tips, Total, OrderID)

PRIMARY KEY: PaymentID

FOREIGN KEY: OrderID REFERENCES Order

**Item** (ItemID, Name, Price, CategoryID)

PRIMARY KEY: ItemID

FOREIGN KEY: CategoryID REFERENCES Category

**Category** (CategoryID, Name)

PRIMARY KEY: CategoryID

**Topping** (ToppingID, Name, ExtraCost)

PRIMARY KEY: ToppingID

**Making** (ItemID, IngredientID, Quantity)

PRIMARY KEY: ItemID, IngredientID

FOREIGN KEY: ItemID REFERENCES Item

FOREIGN KEY: IngredientID REFERENCES Ingredient

**Ingredient** (**IngredientID**, Name, StockLevel, RestockDate)

PRIMARY KEY: IngredientID

**Supplier** (**SupplierID**, SupplierName, Phone, Address, Email)

PRIMARY KEY: SupplierID

**Provide** (**SupplierID**, **IngredientID**, Quantity)

PRIMARY KEY: SupplierID, IngredientID

FOREIGN KEY: SupplierID REFERENCES Supplier

FOREIGN KEY: IngredientID REFERENCES Ingredient

### Domain Definitions:

**CustomerID** is a  
valid customer ID.

Type: Integer

Valid Values: Matches PersonID

Display format: 9999

Length: 4

**PersonID** is a  
valid Person ID.

Type: Integer

Range: low value = 1000, high value = 9999

Display format: 9999

Length: 4

**EmployeeID** is a valid  
employee ID.

Type: Numeric

Range: low value = 1000, high value = 9999

Display format: 9999

Length: 4

**RewardID** is a  
valid reward ID.

Type: Numeric  
Range: low value = 100, high value = 999  
Display format: 999

Length: 3

**LoyaltyID** is a valid  
loyalty program ID.

Type: Numeric  
Range: low value = 100, high value = 999  
Display format: 999

Length: 3

**OrderID** is a valid  
order ID.

Type: Numeric  
Range: low value = 1000, high value = 9999  
Display format: 9999  
Length: 4

**OrderDetailID** is a valid  
order detail ID.

Type: Numeric  
Range: low value = 10000, high value = 99999  
Display format: 99999  
Length: 5

**PaymentID** is a  
valid payment ID.

Type: Numeric  
Range: low value = 100, high value = 999  
Display format: 999

Length: 3

**ItemID**  
is a valid item ID.

Type: Numeric  
Range: low value = 100, high value = 999  
Display format: 999

Length: 3



**ToppingID** is a  
valid topping ID.

Type: Numeric

Range: low value = 100, high value = 999

Display format: 999

Length: 3

**CategoryID** is a  
valid category ID.

Type: Numeric

Range: low value = 100, high value = 999    Display format: 999

Length: 3

**IngredientID** is  
a valid ingredient ID.

Type: Numeric

Range: low value = 100, high value = 999

Display format: 999

Length: 3

**SupplierID** is a  
valid supplier ID.

Type: Numeric

Range: low value = 100, high value = 999

Display format: 999

Length: 3

**Size** is a valid drink size.

Type: Text

Valid values: Small, Medium, Large

Length: up to 6 characters

**SugarLevel** is a valid sugar  
level percentage.

Type: Integer

Valid values: 0, 25, 50, 75, 100

Length: up to 3 digits

**IceLevel** is a valid ice  
level percentage.

Type: Integer  
Valid values: 0, 25, 50, 75, 100  
Length: up to 3 digits

**Price**

is a valid price value.  
Type: Decimal  
Range: 0.00 – 999.99  
Display format: 999.99  
Length: up to 6 digits

**Total**

is a valid total amount.  
Type: Decimal  
Range: 0.00 – 9999.99  
Display format: 9999.99  
Length: up to 8 digits

**Tips**

is a valid tip amount.  
Type: Decimal  
Range: 0.00 – 999.99  
Display format: 999.99  
Length: up to 6 digits

**Amount** is a valid  
payment amount.  
Type: Decimal  
Range: 0.00 – 9999.99  
Display format: 9999.99  
Length: up to 8 digits

**PaymentType** is a  
valid payment method.

Type: Text  
Valid values: Cash, Credit Card, Mobile Pay  
Length: up to 15 characters

**PointRequest** is the number of points required to  
redeem a reward.

Type: Integer

Range: 0 – 1000

Length: up to 4 digits

**Points**

is the number of loyalty points.

Type: Integer

Range: 0 – 1000

Length: up to 4 digits

**StockLevel** is the amount of ingredients available.

Type: Integer

Range: 0 – 1000

Length: up to 4 digits

**Quantity** is the quantity used or provided.

Type: Integer

Range: 0 – 1000

Length: up to 4 digits

**RestockDate** is the date when the ingredient will be restocked.

Type: Date

Format: YYYY-MM-DD

Note: Must be a valid future date

**PersonType** is a valid type of person.

Type: Text

Valid values: Customer, Employee

Length: up to 10 characters

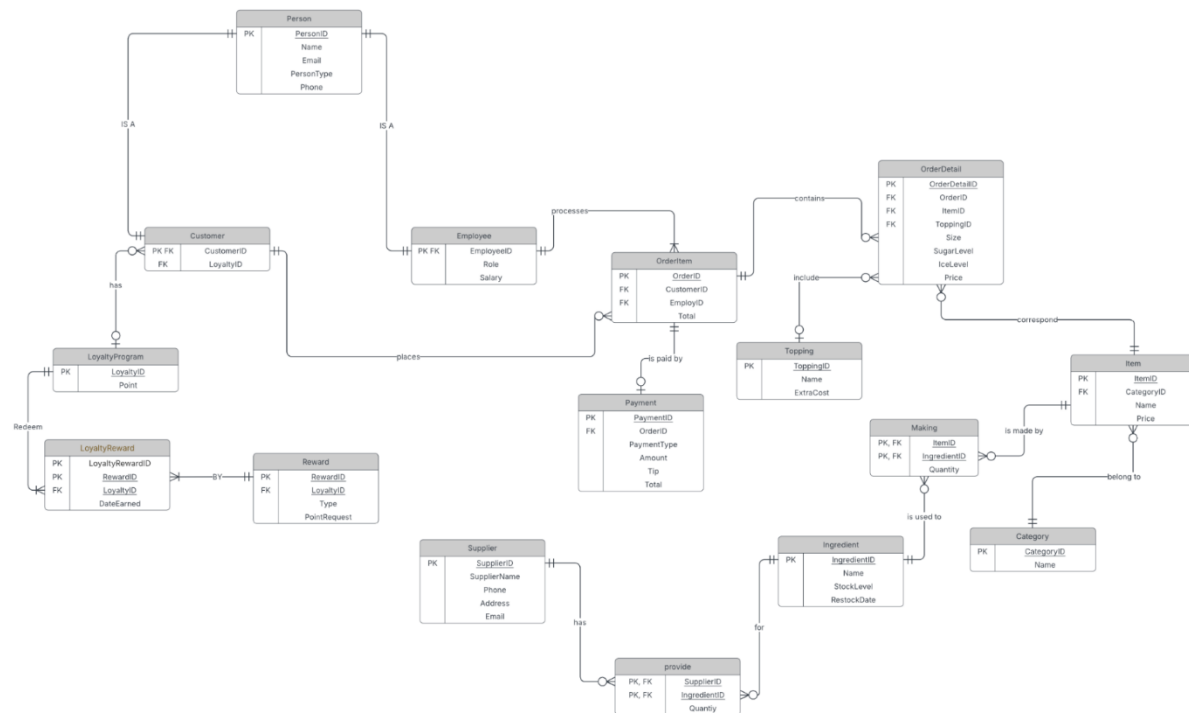
**Role** is a valid employee role.

Type: Text

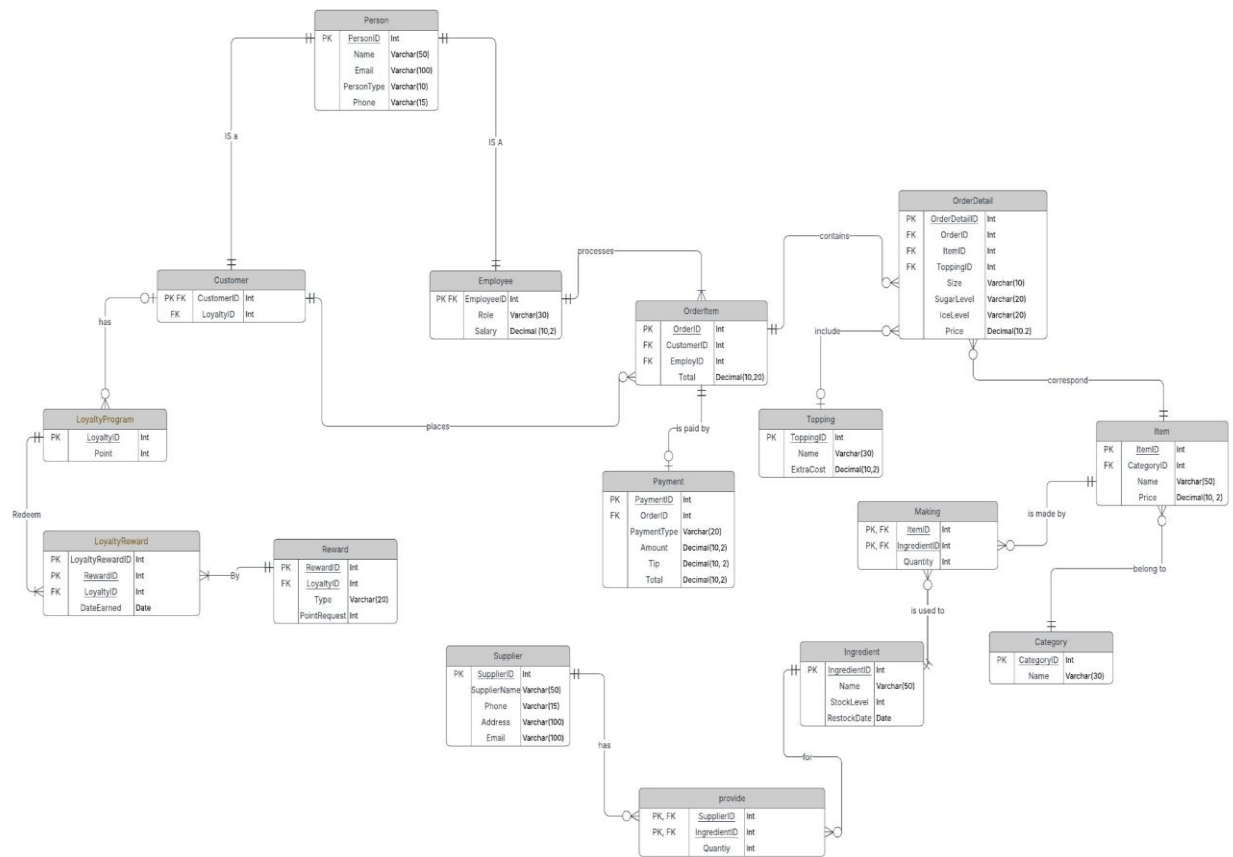
Valid values: Manager, Cashier, Barista, Cleaner

Length: up to 20 characters

## Logical EERD



# Physical EERD



# Query Design

## 3.1 Show top 5 best-selling items (by number of times ordered)

Retrieves the five items that have been ordered the most times. Groups the order records by item name, sorts them in descending order, and limits the results to the top five.

```
1  -- 1. Show top 5 best-selling items (by number of times ordered)
2  SELECT i.Name, COUNT(*) AS TimesOrdered
3  FROM OrderDetail od
4  JOIN Item i ON od.ItemID = i.ItemID
5  GROUP BY i.Name
6  ORDER BY TimesOrdered DESC
7  LIMIT 5;
```

100% 9:7

Result Grid Filter Rows: Search Export: Fetch rows:

Name	TimesOrdered
Classic Milk Tea	1
Brown Sugar Milk Tea	1
Passion Fruit Green Tea	1
Mango Green Tea	1
Strawberry Smoothie	1

## 3.2 Check loyalty point that customer collected

The customers input their ID, it will show how many points they collected.

Limit to 1000 rows

```
1  -- 2. Check loyalty point that customer collected
2  SELECT p.Name AS CustomerName, lp.Point
3  FROM LoyaltyProgram lp
4  JOIN Customer c ON lp.LoyaltyID = c.LoyaltyID
5  JOIN Person p ON c.CustomerID = p.PersonID
6  WHERE c.CustomerID = "1";
```

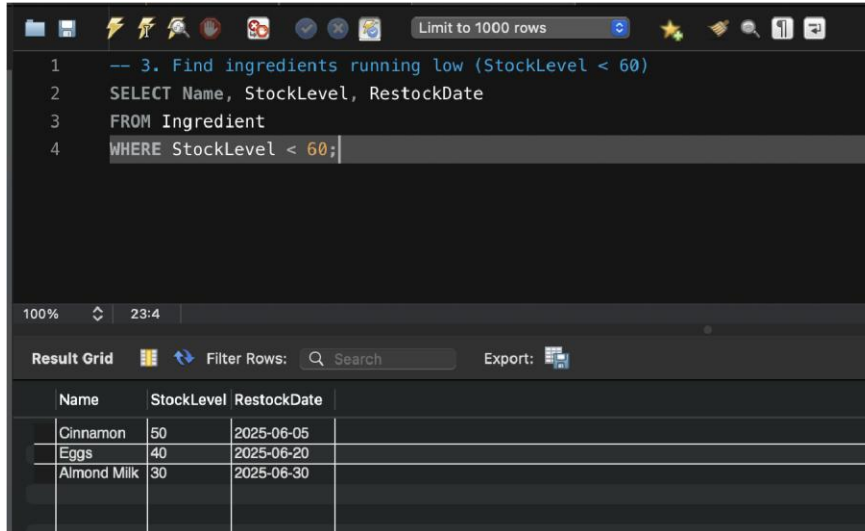
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Result Grid Filter Rows: Search Export:

CustomerName	Point
John Doe	150

### 3.3 Find ingredients running low stock (stock level < 60)

Identifies the ingredients that are running low. Displays the name, current stock level, and restock date where the stock level is less than 60 units.



```
1 -- 3. Find ingredients running low (StockLevel < 60)
2 SELECT Name, StockLevel, RestockDate
3 FROM Ingredient
4 WHERE StockLevel < 60;
```

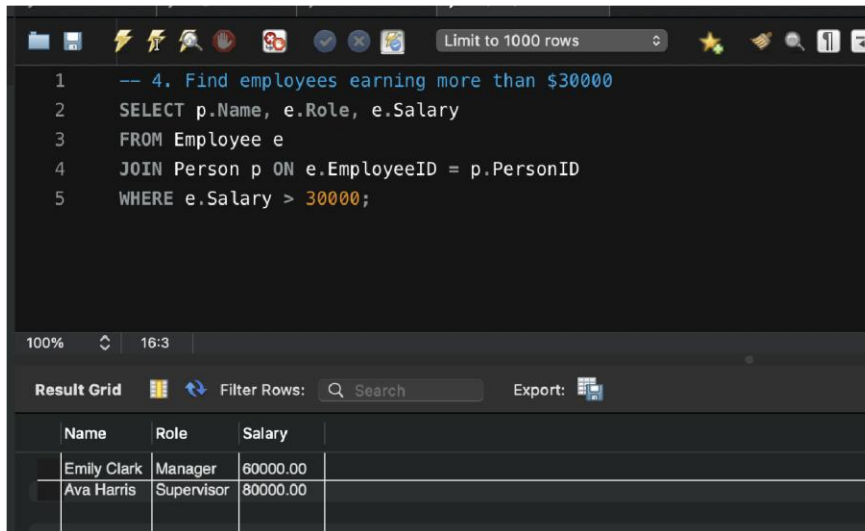
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Result Grid Filter Rows: Search Export:

Name	StockLevel	RestockDate
Cinnamon	50	2025-06-05
Eggs	40	2025-06-20
Almond Milk	30	2025-06-30

### 3.4 Find employees earning more than \$30000

Retrieves details about employees who earn more than \$30,000 annually. Displays their name, role, and respective salary information.



```
1 -- 4. Find employees earning more than $30000
2 SELECT p.Name, e.Role, e.Salary
3 FROM Employee e
4 JOIN Person p ON e.EmployeeID = p.PersonID
5 WHERE e.Salary > 30000;
```

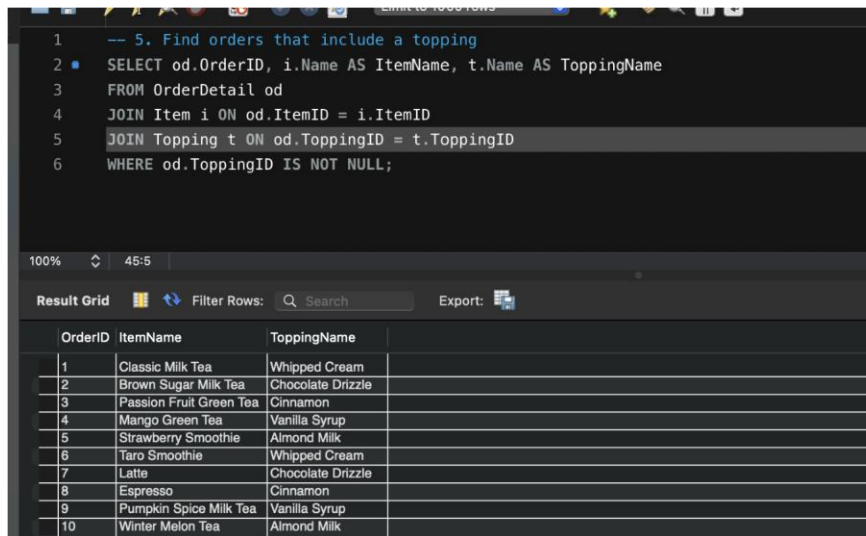
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Result Grid Filter Rows: Search Export:

Name	Role	Salary
Emily Clark	Manager	60000.00
Ava Harris	Supervisor	80000.00

### 3.5 Find orders that include a topping

Identifies which orders include toppings. Contains the Order ID, Item Name, and the topping name.



```
1 -- 5. Find orders that include a topping
2 SELECT od.OrderID, i.Name AS ItemName, t.Name AS ToppingName
3 FROM OrderDetail od
4 JOIN Item i ON od.ItemID = i.ItemID
5 JOIN Topping t ON od.ToppingID = t.ToppingID
6 WHERE od.ToppingID IS NOT NULL;
```

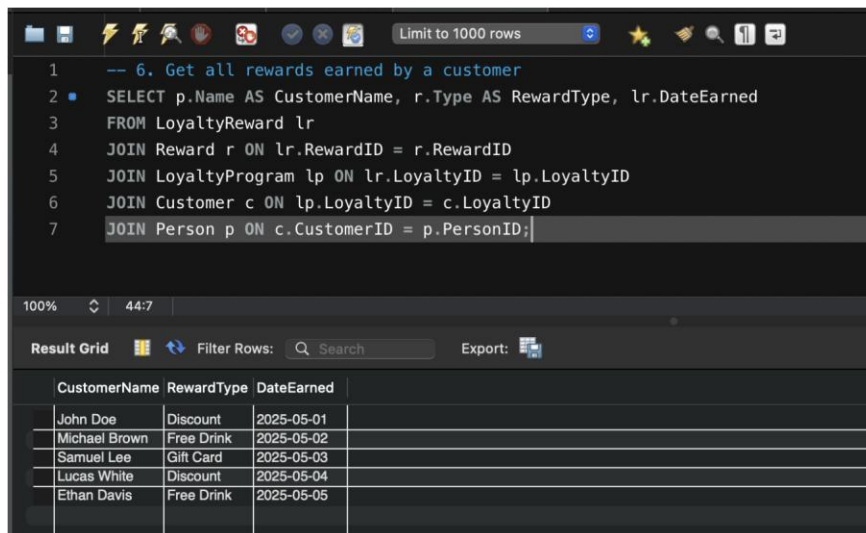
100% 45:5

Result Grid Filter Rows: Search Export:

OrderID	ItemName	ToppingName
1	Classic Milk Tea	Whipped Cream
2	Brown Sugar Milk Tea	Chocolate Drizzle
3	Passion Fruit Green Tea	Cinnamon
4	Mango Green Tea	Vanilla Syrup
5	Strawberry Smoothie	Almond Milk
6	Taro Smoothie	Whipped Cream
7	Latte	Chocolate Drizzle
8	Espresso	Cinnamon
9	Pumpkin Spice Milk Tea	Vanilla Syrup
10	Winter Melon Tea	Almond Milk

### 3.6 Get all rewards earned by a customer

Retrieves a list of all rewards that a specific customer earned. Lists the customer's name, the reward type, and the date it earned the reward.



```
1 -- 6. Get all rewards earned by a customer
2 SELECT p.Name AS CustomerName, r.Type AS RewardType, lr.DateEarned
3 FROM LoyaltyReward lr
4 JOIN Reward r ON lr.RewardID = r.RewardID
5 JOIN LoyaltyProgram lp ON lr.LoyaltyID = lp.LoyaltyID
6 JOIN Customer c ON lp.LoyaltyID = c.LoyaltyID
7 JOIN Person p ON c.CustomerID = p.PersonID;
```

100% 44:7

Result Grid Filter Rows: Search Export:

CustomerName	RewardType	DateEarned
John Doe	Discount	2025-05-01
Michael Brown	Free Drink	2025-05-02
Samuel Lee	Gift Card	2025-05-03
Lucas White	Discount	2025-05-04
Ethan Davis	Free Drink	2025-05-05



### 3.7 Rank customers by total spending

Ranks customers based on their total spending. The query is grouped by name and the results are sorted in descending order, where the highest spending customer is shown at the top.

```
1  -- 7. Rank customers by total spending
2  SELECT p.Name, SUM(o.Total) AS TotalSpent
3  FROM OrderItem o
4  JOIN Customer c ON o.CustomerID = c.CustomerID
5  JOIN Person p ON c.CustomerID = p.PersonID
6  GROUP BY p.Name
7  ORDER BY TotalSpent DESC;
```

100% 26:7

Result Grid Filter Rows: Search Export:

Name	TotalSpent
Ethan Davis	10.00
Michael Brown	9.00
Samuel Lee	8.25
John Doe	7.50
Lucas White	6.75

### 3.8 Show top 3 ingredients used across all items

Retrieves the three ingredients that have most frequently been used across all items. Groups the results by ingredient name, sorts them in descending order based on the quantity used, and limits the results to the top three.

```

1 -- 7. Show top 3 ingredients used across all items
2 SELECT i.Name, SUM(m.Quantity) AS TotalUsed
3 FROM Making m
4 JOIN Ingredient i ON m.IngredientID = i.IngredientID
5 GROUP BY i.Name
6 ORDER BY TotalUsed DESC
7 LIMIT 3;

```

Name	TotalUsed
Cinnamon	70
Coffee Beans	60
Almond Milk	60

### 3.9 Find the average tip amount per payment type

Calculates the average tip amount for each payment type used by customers.

```

1 -- 9 Find the average tip amount per payment type
2 SELECT PaymentType, AVG(Tip) AS AverageTip
3 FROM Payment
4 GROUP BY PaymentType;

```

PaymentType	AverageTip
Credit Card	1.000000
Cash	0.750000
Debit Card	0.750000

### 3.10 Show items that cost more than the average item price in their category

Lists beverages priced higher than the average price within their category.

```

1  -- 10 Show items that cost more than the average item price in their category
2  SELECT i.Name, i.Price, c.Name AS CategoryName
3  FROM Item i
4  JOIN Category c ON i.CategoryID = c.CategoryID
5  WHERE i.Price > (
6      SELECT AVG(i2.Price)
7      FROM Item i2
8      WHERE i2.CategoryID = i.CategoryID
9  );

```

100% 47-4

Result Grid Filter Rows: Search Export:

Name	Price	CategoryName
Brown Sugar Milk Tea	5.00	Milk Tea
Passion Fruit Green Tea	4.80	Fruit Tea
Latte	4.00	Coffee
Pumpkin Spice Milk Tea	5.20	Seasonal

# Database Implementation with MySQL

## Category Table

Person Category - Table

Name: Category Schema: coffee\_shop\_V3

Column	Datatype	PK	NN	UQ	B...	UN	ZF	AI	G	Default / Expression
CategoryID	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Name	VARCHAR(30)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL

<click to edit>

CategoryID	Name
1	Milk Tea
2	Fruit Tea
3	Smoothie
4	Coffee
5	Seasonal
6	Bubble Tea
7	Iced Tea
8	Hot Chocolate
9	Juice
10	Soda
11	Energy Drink
12	Health Shot
13	Frappe
14	Milkshake
NULL	NULL

Customer Table

Name:

Schema: coffee\_shop\_V3

Column	Datatype	PK	NN	UQ	B...	UN	ZF	AI	G	Default / Expression
CustomerID	INT									
LoyaltyID	INT									NULL
<click to edit>										

	CustomerID	LoyaltyID	
	1	101	
	3	102	
	5	103	
	7	104	
	9	105	
	NULL	NULL	

Employee Table

Name:

Schema: coffee\_shop\_V3

Column	Datatype	PK	NN	UQ	B...	UN	ZF	AI	G	Default / Expression
EmployeeID	INT									
Role	VARCHAR(30)									NULL
Salary	DECIMAL(10,2)									NULL
<click to edit>										

	EmployeeID	Role	Salary	
	2	Barista	30000.00	
	4	Manager	60000.00	
	6	Cashier	30000.00	
	8	Barista	30000.00	
	10	Supervisor	80000.00	
	NULL	NULL	NULL	

Ingredient Table


Name:

Schema: coffee\_shop\_V3

Datatype	PK	NN	UQ	B...	UN	ZF	AI	G	Default / Expression
INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
VARCHAR(50)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
INT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
DATE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

	IngredientID	Name	StockLevel	RestockDate	
	1	Milk	100	2025-05-15	
	2	Coffee Beans	200	2025-05-20	
	3	Sugar	150	2025-05-25	
	4	Chocolate Syrup	80	2025-06-01	
	5	Cinnamon	50	2025-06-05	
	6	Flour	60	2025-06-10	
	7	Butter	70	2025-06-15	
	8	Eggs	40	2025-06-20	
	9	Vanilla Syrup	90	2025-06-25	
	10	Almond Milk	30	2025-06-30	
	NULL	NULL	NULL	NULL	

Item Table

Name:

Schema: coffee\_shop\_V3

Column	Datatype	PK	NN	UQ	B...	UN	ZF	AI	G	Default / Expression
ItemID	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
CategoryID	INT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
Name	VARCHAR(50)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
Price	DECIMAL(10,2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
<click to edit>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

ItemID	CategoryID	Name	Price	
1	1	Classic Milk Tea	4.50	
2	1	Brown Sugar Milk Tea	5.00	
3	2	Passion Fruit Green Tea	4.80	
4	2	Mango Green Tea	4.60	
5	3	Strawberry Smoothie	5.50	
6	3	Taro Smoothie	5.50	
7	4	Latte	4.00	
8	4	Espresso	3.50	
9	5	Pumpkin Spice Milk Tea	5.20	
10	5	Winter Melon Tea	4.40	
NULL	NULL	NULL	NULL	

Loyalty Program Table

Name: LoyaltyProgram

Schema: coffee\_shop\_V3

Column	Datatype	PK	NN	UQ	B...	UN	ZF	AI	G	Default / Expression
LoyaltyID	INT	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	
Point	INT	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	NULL
<click to edit>										

	LoyaltyID	Point	
	101	150	
	102	200	
	103	300	
	104	250	
	105	400	
	106	350	
	107	450	
	108	500	
	109	600	
	110	700	
	NULL	NULL	

Loyalty Reward Table

Name: LoyaltyReward

Schema: coffee\_shop\_V3

Column	Datatype	PK	NN	UQ	B...	UN	ZF	AI	G	Default / Expression
LoyaltyRear...	INT	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	
LoyaltyID	INT	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	NULL
RewardID	INT	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	NULL
DateEarned	DATE	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	NULL
<click to edit>										


	LoyaltyRewardID	LoyaltyID	RewardID	DateEarned	
	1	101	1	2025-05-01	
	2	102	2	2025-05-02	
	3	103	3	2025-05-03	
	4	104	4	2025-05-04	
	5	105	5	2025-05-05	
	6	106	6	2025-05-06	
	7	107	7	2025-05-07	
	8	108	8	2025-05-08	
	9	109	9	2025-05-09	
	10	110	10	2025-05-10	
	NULL	NULL	NULL	NULL	

















































































## Making Table

Name: Making		Schema: coffee_shop_V3									
Column	Datatype	PK	NN	UQ	B...	UN	ZF	AI	G	Default / Expression	
ItemID	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
IngredientID	INT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL	
Quantity	INT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL	
<click to edit>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

ItemID	IngredientID	Quantity
1	1	50
2	2	60
3	3	40
4	4	30
5	5	70
6	6	20
7	7	30
8	8	40
9	9	50
10	10	60
NULL	NULL	NULL

### Order Detail Table


Name: 
Schema: coffee\_shop\_V3

Column	Datatype	PK	NN	UQ	B...	UN	ZF	AI	G	Default / Expression
 OrderDetailID	INT									
 OrderID	INT									NULL
 ItemID	INT									NULL
 ToppingID	INT									NULL
 Size	VARCHAR(10)									NULL
 SugarLevel	VARCHAR(20)									NULL
 IceLevel	VARCHAR(20)									NULL
 Price	DECIMAL(10,2)									NULL
<click to edit>										

[illegible]

Order Item Table

Name:

Schema: coffee\_shop\_V3

Column	Datatype	PK	NN	UQ	B...	UN	ZF	AI	G	Default / Expression
OrderID	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
CustomerID	INT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
EmployID	INT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
Total	DECIMAL(10,2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
<click to edit>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

OrderID	CustomerID	EmployID	Total
1	1	NULL	7.50
2	3	NULL	9.00
3	5	NULL	8.25
4	7	NULL	6.75
5	9	NULL	10.00
6	NULL	2	12.50
7	NULL	4	15.00
8	NULL	6	13.00
9	NULL	8	14.00
10	NULL	10	11.50
NULL	NULL	NULL	NULL

Payment Table

Name:

Schema: coffee\_shop\_V3

Column	Datatype	PK	NN	UQ	B...	UN	ZF	AI	G	Default / Expression
PaymentID	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
OrderID	INT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
PaymentType	VARCHAR(20)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
Amount	DECIMAL(10,2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
Tip	DECIMAL(10,2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
Total	DECIMAL(10,2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
<click to edit>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

PaymentID	OrderID	PaymentType	Amount	Tip	Total
1	1	Credit Card	7.50	1.00	8.50
2	2	Cash	9.00	0.50	9.50
3	3	Debit Card	8.25	1.25	9.50
4	4	Credit Card	6.75	0.75	7.50
5	5	Cash	10.00	1.00	11.00
6	6	Debit Card	8.00	0.50	8.50
7	7	Credit Card	7.50	1.00	8.50
8	8	Cash	9.50	0.75	10.25
9	9	Debit Card	6.50	0.50	7.00
10	10	Credit Card	9.00	1.25	10.25
NULL	NULL	NULL	NULL	NULL	NULL



## Person Table

Name: <input type="text" value="Person"/>		Schema: coffee_shop_V3									
Column	Datatype	PK	NN	UQ	B...	UN	ZF	AI	G	Default / Expression	
PersonID	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Name	VARCHAR(50)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL	
Email	VARCHAR(100)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL	
PersonType	VARCHAR(10)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL	
Phone	VARCHAR(15)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL	
<click to edit>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

PersonID	Name	Email	PersonType	Phone	
1	John Doe	john.doe@email.com	Customer	123-456-7890	
2	Jane Smith	jane.smith@email.com	Employee	987-654-3210	
3	Michael Brown	michael.brown@email.com	Customer	555-555-5555	
4	Emily Clark	emily.clark@email.com	Employee	444-444-4444	
5	Samuel Lee	samuel.lee@email.com	Customer	333-333-3333	
6	Olivia King	olivia.king@email.com	Employee	222-222-2222	
7	Lucas White	lucas.white@email.com	Customer	111-111-1111	
8	Sophia Turner	sophia.turner@email.com	Employee	666-666-6666	
9	Ethan Davis	ethan.davis@email.com	Customer	777-777-7777	
10	Ava Harris	ava.harris@email.com	Employee	888-888-8888	
NULL	NULL	NULL	NULL	NULL	

## Provide Table

Name: <input type="text" value="Provide"/>		Schema: coffee_shop_V3									
Column	Datatype	PK	NN	UQ	B...	UN	ZF	AI	G	Default / Expression	
SupplierID	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
IngredientID	INT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL	
Quantity	INT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL	
<click to edit>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

SupplierID	IngredientID	Quantity	
1	1	200	
2	2	150	
3	3	100	
4	4	50	
5	5	300	
6	6	250	
7	7	200	
8	8	150	
9	9	100	
10	10	200	
NULL	NULL	NULL	

## Reward Table

Name: <b>Reward</b>		Schema: coffee_shop_V3									
Column	Datatype	PK	NN	UQ	B...	UN	ZF	AI	G	Default / Expression	
RewardID	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
LoyaltyID	INT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL	
Type	VARCHAR(20)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL	
PointRequest	INT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL	
<click to edit>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		


RewardID	LoyaltyID	Type	PointRequest	
1	101	Discount	100	
2	102	Free Drink	200	
3	103	Gift Card	300	
4	104	Discount	150	
5	105	Free Drink	250	
6	106	Gift Card	350	
7	107	Discount	120	
8	108	Free Drink	220	
9	109	Gift Card	320	
10	110	Discount	130	
NULL	NULL	NULL	NULL	

## Supplier Table

Name: <b>Supplier</b>		Schema: coffee_shop_V3									
Column	Datatype	PK	NN	UQ	B...	UN	ZF	AI	G	Default / Expression	
SupplierID	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
SupplierName	VARCHAR(50)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL	
Phone	VARCHAR(15)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL	
Address	VARCHAR(100)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL	
Email	VARCHAR(100)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL	
<click to edit>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

SupplierID	SupplierName	Phone	Address	Email	
1	Supplier A	111-222-3333	123 Supplier St	supplierA@email.com	
2	Supplier B	444-555-6666	456 Supplier Ave	supplierB@email.com	
3	Supplier C	777-888-9999	789 Supplier Blvd	supplierC@email.com	
4	Supplier D	222-333-4444	101 Supplier Rd	supplierD@email.com	
5	Supplier E	555-666-7777	202 Supplier Ln	supplierE@email.com	
6	Supplier F	888-999-0000	303 Supplier Dr	supplierF@email.com	
7	Supplier G	333-444-5555	404 Supplier Pl	supplierG@email.com	
8	Supplier H	666-777-8888	505 Supplier Way	supplierH@email.com	
9	Supplier I	999-000-1111	606 Supplier Cr	supplierI@email.com	
10	Supplier J	000-111-2222	707 Supplier Ct	supplierJ@email.com	
NULL	NULL	NULL	NULL	NULL	


# Topping Table





















































Name: 

Topping

Schema: coffee\_shop\_V3



Column	Datatype	PK	NN	UQ	B...	UN	ZF	AI	G	Default / Expression
 ToppingID	INT									
 Name	VARCHAR(30) 									NULL
 ExtraCost	DECIMAL(10,2) 									NULL
 <click to edit>										

	ToppingID	Name	ExtraCost	
	1	Whipped Cream	0.50	
	2	Chocolate Drizzle	0.75	
	3	Cinnamon	0.25	
	4	Vanilla Syrup	0.30	
	5	Almond Milk	0.60	
	6	Caramel Syrup	0.70	
	7	Oat Milk	0.50	
	8	Hazelnut Syrup	0.80	
	9	Mocha Syrup	0.60	
	10	Extra Espresso Shot	1.00	
	NULL	NULL	NULL	