



Nora's Bagel Bin Database Blueprints

First Normal Form (1NF)

BAGEL ORDER	
PK	Bagel Order ID
PK	Bagel ID
	Order Date
	First Name
	Last Name
	Address 1
	Address 2
	City
	State
	Zip
	Mobile Phone
	Delivery Fee
	Bagel Name
	Bagel Description
	Bagel Price
	Bagel Quantity
	Special Notes

Nora's Bagel Bin Database Blueprints *(continued)*

Second Normal Form (2NF)

BAGEL ORDER	
PK	Bagel Order ID
	Order Date
	First Name
	Last Name
	Address 1
	Address 2
	City
	State
	Zip
	Mobile Phone
	Delivery Fee
	Special Notes

BAGEL ORDER LINE ITEM	
FK	Bagel Order ID
FK	Bagel ID
	Bagel Quantity

BAGEL	
PK	Bagel ID
	Bagel Name
	Bagel Description
	Bagel Price

The overall relationship between Bagel Order and Bagel Table is a many-to-many. Because of that we can make an associative entry with intersecting data. This then gives us a one-to-many relationship with Bagel Order and Bagel Order Line Item, and a many-to-one relationship with Bagel Order Line Item and Bagel. A single instance of Bagel Order Line Item relates to a single Bagel Order and to a single Bagel. A Single Bagel Order can correspond to many Bagel Order Line Items. A single Bagel can correspond to many Bagel Order Line Items

To assign the table from 1st normal form to 2nd normal form, the table is split into 3 tables. The first table Bagel Order is created with the following attributes: Bagel order ID, order date, first name, last name, address 1, address 2, city, state, zip, mobile phone, delivery fee, and special notes. There are still transitive dependencies but the table satisfies the requirements to be in 2nd normal form. The second table, Bagel Order Line Item is an associative entry created to keep track of the bagel quantities from the order. The last table is the Bagel table which satisfies the requirements for being in 2nd normal form.

Nora's Bagel Bin Database Blueprints *(continued)*

Third Normal Form (3NF)

BAGEL ORDER	
PK	Bagel Order ID
FK	CustomerID
	Order Date
	Delivery Fee
	Special Notes

BAGEL ORDER LINE ITEM	
PK / FK	Bagel Order ID
PK / FK	Bagel ID
	Bagel Quantity

BAGEL	
PK	Bagel ID
	Bagel Name
	Bagel Description
	Bagel Price

CUSTOMER	
PK	CustomerID
	First Name
	Last Name
	Address 1
	Address 2
	City
	State
	Zip
	Mobile Phone

To convert this table into the 3rd normal form, bagel order had to be split into another table due to the transitive dependencies, meaning there were still non-key columns that depended on part of the primary key. To resolve that, a new table, Customer was created with a new column, CustomerID, that acts as a foreign key in the Bagel Order table and the primary in the Customer table, linking them together and thus putting the database in 3rd normal form. The relationship between bagel order and customer is a Many-to-one. Since one order has to come from at most 1 customer and a customer can place many orders.

Nora's Bagel Bin Database Blueprints *(continued)*

Final Physical Database Model

BAGEL ORDER			BAGEL ORDER LINE ITEM			BAGEL		
PK	Bagel_Order_ID	INT	PK / FK	bagel_order_id	INT	PK	Bagel_ID	CHAR(2) UNIQUE
FK	CustomerID	INT	PK / FK	bagel_id	CHAR(2)	PK	Bagel_Name	VARCHAR(60)
	Order_Date	TIMESTAMP		Bagel_Quantity	INT		Bagel>Description	VARCHAR(150)
	Delivery_Fee	INT					Bagel_Price	NUMERIC(4, 2)
	Special_Notes	VARCHAR(60)						

CUSTOMER		
PK	CustomerID	INT UNIQUE
	First_Name	VARCHAR(50)
	Last_Name	VARCHAR(50)
	Address_1	VARCHAR(150)
	Address_2	VARCHAR(150)
	City	VARCHAR(50)
	State	CHAR(2)
	Zip	INT
	Mobile_Phone	VARCHAR(16)

MySQL Workbench

MySQL 8.0.13306 Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

SQL File 3 SQL File 4 SQL File 5 SQL File 6

Navigator Schemas

Filter objects

SCHEMAS

c170

Tables

- coffee
- coffee_shop
- employee
- supplier

Views

Stored Procedures

Functions

sys

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

```

1 • CREATE TABLE COFFEE_SHOP (
2     shop_id INT,
3     shop_name VARCHAR(50),
4     city VARCHAR(50),
5     state CHAR(2),
6     PRIMARY KEY(shop_id)
7 );
8
9 • CREATE TABLE EMPLOYEE (
10    employee_id INT,
11    first_name VARCHAR(30),
12    last_name VARCHAR(30),
13    hire_date DATE,
14    job_title VARCHAR(30),
15    shop_id INT,
16    PRIMARY KEY (employee_id),
17    FOREIGN KEY (shop_id) REFERENCES COFFEE_SHOP (shop_id)
18 );
19 • CREATE TABLE SUPPLIER (
20    supplier_id INT,
21    company_name VARCHAR(50),
22    country VARCHAR(30),
23    sales_contact_name VARCHAR(50),
24    email VARCHAR(50) NOT NULL,
25    PRIMARY KEY (supplier_id)
26 );
27
28 • CREATE TABLE COFFEE (
29    coffee_id INT,
30    shop_id INT,
31    supplier_id INT,
32    coffee_name VARCHAR(20),
33    price_per_pound NUMERIC(5,2),
34    PRIMARY KEY (coffee_id),
35    FOREIGN KEY (shop_id) REFERENCES COFFEE_SHOP (shop_id),
36    FOREIGN KEY (supplier_id) REFERENCES SUPPLIER (supplier_id)
37 );
38
39

```

Table: coffee_shop

Columns:

shop_id	int	PK
shop_name	varchar(50)	
city	varchar(50)	
state	char(2)	

Action Output

Time	Action	Message	Duration / Batch
13 17:02:05	ALTER TABLE supplier ADD PRIMARY KEY(supplier_id)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.109 sec
14 17:02:25	ALTER TABLE coffee_shop ADD PRIMARY KEY(shop_id)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.344 sec
15 17:03:11	ALTER TABLE employee ADD FOREIGN KEY (shop_id) REFERENCES COFFEE_SHOP (shop_id)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.235 sec
16 17:04:26	ALTER TABLE coffee ADD FOREIGN KEY (shop_id) REFERENCES COFFEE_SHOP (shop_id); ALTER TABLE coffee ADD FOREIGN KEY (supplier_id) REFERENCES supplier (supplier_id)	Error Code: 1064 You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'ALTER TABLE coffee ADD FOREIGN KEY (supplier_id) REFERENCES supplier (supplier_id)' at line 1	0.000 sec
17 17:04:31	ALTER TABLE coffee ADD FOREIGN KEY (shop_id) REFERENCES COFFEE_SHOP (shop_id)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.250 sec
18 17:04:35	ALTER TABLE coffee ADD FOREIGN KEY (supplier_id) REFERENCES supplier (supplier_id)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	2.500 sec
19 17:05:39	DROP DATABASE c170	4 row(s) affected	0.015 sec
20 17:09:04	CREATE DATABASE c170	1 row(s) affected	0.000 sec
21 17:10:42	CREATE TABLE employee (employee_id INT, first_name VARCHAR(30), last_name VARCHAR(30), hire_date DATE, job_title VARCHAR(30), shop_id INT, PRIMARY KEY(employee_id), FOREIGN KEY (shop_id) REFERENCES coffee_shop)	Error Code: 1024 Failed to open the referenced table 'coffee_shop'	0.000 sec
22 17:12:10	CREATE TABLE COFFEE_SHOP (shop_id INT, shop_name VARCHAR(50), city VARCHAR(50), state CHAR(2), PRIMARY KEY(shop_id))	0 row(s) affected	0.094 sec
23 17:12:16	CREATE TABLE EMPLOYEE (employee_id INT, first_name VARCHAR(30), last_name VARCHAR(30), hire_date DATE, job_title VARCHAR(30), shop_id INT, PRIMARY KEY(employee_id), FOREIGN KEY (shop_id) REFERENCES coffee_shop)	0 row(s) affected	0.109 sec
24 17:12:16	CREATE TABLE SUPPLIER (supplier_id INT, company_name VARCHAR(50), country VARCHAR(50), sales_contact_name VARCHAR(50) NOT NULL, email VARCHAR(50) NOT NULL, PRIMARY KEY (supplier_id))	0 row(s) affected	0.078 sec
25 17:12:16	CREATE TABLE COFFEE (coffee_id INT, shop_id INT, supplier_id INT, coffee_name VARCHAR(30), price_per_pound NUMERIC(5,2), PRIMARY KEY (coffee_id), FOREIGN KEY (shop_id) REFERENCES coffee_shop)	0 row(s) affected	0.157 sec

Object Info Session

531 PM 3/10/2023

PART B.1: Create 4 Tables: Creation of tables based on 'Jaunty Coffee Co. ERD'. Bottom portion of the screen shows database response

MySQL Workbench

MySQL@127.0.0.1:3306 Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

SQL File 3 SQL File 4 SQL File 5 SQL File 6

Limit to 1000 rows

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

SCHEMAS

Filter objects

c170

Tables

- coffee
- coffee_shop
- employee
- supplier
- VIEWS
- Stored Procedures
- Functions
- sys
- saclis

```

1 # INSERT INTO coffee_shop
2   VALUES (12, 'Crazy Coffee', 'Spring', 'TX'),
3           (13, 'Coffee coffee coffee!', 'Las Vegas', 'NV'),
4           (10, 'Just Right Coffee', 'Las Cruces', 'NM')
5
6 # INSERT INTO employee
7   VALUES (1, 'Bob', 'Igor', '2023-03-10', 'Barista', 10),
8           (2, 'Smith', 'Jones', '2023-01-01', 'Cashier', 11),
9           (3, 'Cheezeit', 'Mogeo', '2022-01-01', 'Manager', 12)
10
11 # INSERT INTO supplier
12   VALUES (20, 'Coffee Supplier', 'Peru', 'jimbob@coffee.com'),
13           (21, 'The Beany Best Coffee', 'Canada', 'Ray', 'ray@coffeebean.com'),
14           (22, 'Roasted Delight', 'Brazil', 'Jeff', 'jeff@yuncoffee.com')
15
16 # INSERT INTO coffee
17   VALUES (100, 10, 20, 'Javaing me Crazy!', 12.99),
18           (101, 11, 21, 'Vanilla Latte', 10.99),
19           (102, 12, 22, 'Cold Brew Dude', 15.99)
20
21
22

```

Administration Schemas Information

Table: coffee

Columns:

coffee_id	shop_id	supplier_id	coffee_name	price_per_pound
int PK	int	int	varchar(30)	decimal(5,2)

Action Output

Time Action

Message Duration / Fetch

22 17:12:16 CREATE TABLE COFFEE_SHOP (shop_id INT, shop_name VARCHAR(50), state CHAR(2), PRIMARY KEY(shop_id)) 0.094 sec
 23 17:12:16 CREATE TABLE EMPLOYEE (employee_id INT, first_name VARCHAR(40), last_name VARCHAR(40), hire_date DATE, job_id INT, PRIMARY KEY(employee_id), FOREIGN KEY(job_id) REFERENCES job_title) 0.109 sec
 24 17:12:16 CREATE TABLE SUPPLIER (supplier_id INT, company_name VARCHAR(50), country VARCHAR(30), sales_contact_name VARCHAR(50) NOT NULL, PRIMARY KEY(supplier_id)) 0.078 sec
 25 17:12:16 CREATE TABLE COFFEE (coffee_id INT, shop_id INT, supplier_id INT, coffee_name VARCHAR(50), price_per_pound NUMERIC(2,2), PRIMARY KEY(coffee_id), FOREIGN KEY(coffee_id) REFERENCES coffee_shop) 0.157 sec
 26 17:31:37 INSERT INTO employee VALUES (1, Bob, 'Igor', 2023-03-10, 'Barista', 10), (2, Smith, 'Jones', 2023-01-01, 'Cashier', 11), (3, Cheezeit, 'Mogeo', 2022-01-01, 'Manager', 12) Err Code: 1452. Cannot add or update a child row: a foreign key constraint fails ('c170`.`employee', CONSTRAINT `employee_ibfk_1` FOREIGN KEY(`shop_id`) REFERENCES `coffee_shop`(`shop_id`)) 0.000 sec
 27 17:32:10 INSERT INTO coffee_shop VALUES (12, 'Crazy Coffee', 'Spring', 'TX'), (11, 'Coffee coffee coffee!', 'Las Vegas', 'NV'), (10, 'Just Right Coffee', 'Las Cruces', 'NM') 3 rows affected Records: 3 Duplicates: 0 Warnings: 0 0.016 sec
 28 17:32:10 INSERT INTO employee VALUES (1, Bob, 'Igor', 2023-03-10, 'Barista', 10), (2, Smith, 'Jones', 2023-01-01, 'Cashier', 11), (3, Cheezeit, 'Mogeo', 2022-01-01, 'Manager', 12) 3 rows affected Records: 3 Duplicates: 0 Warnings: 0 0.016 sec
 29 17:32:11 INSERT INTO supplier VALUES (20, 'Coffee Supplier', 'Peru', 'jimbob@coffee.com'), (21, 'The Beany Best Coffee', 'Canada', 'Ray', 'ray@coffeebean.com'), (22, 'Roasted Delight', 'Brazil', 'Jeff', 'jeff@yuncoffee.com') Err Code: 1146. Table 'c170.supplier' doesn't exist 0.000 sec
 30 17:32:11 INSERT INTO coffee_shop VALUES (12, 'Crazy Coffee', 'Spring', 'TX'), (11, 'Coffee coffee coffee!', 'Las Vegas', 'NV'), (10, 'Just Right Coffee', 'Las Cruces', 'NM') Err Code: 1062. Duplicate entry '12' for key 'coffee_shop.PRIMARY' 0.000 sec
 31 17:32:52 INSERT INTO coffee_shop VALUES (12, 'Crazy Coffee', 'Spring', 'TX'), (11, 'Coffee coffee coffee!', 'Las Vegas', 'NV'), (10, 'Just Right Coffee', 'Las Cruces', 'NM') Err Code: 1062. Duplicate entry '12' for key 'coffee_shop.PRIMARY' 0.000 sec
 32 17:33:01 INSERT INTO employee VALUES (1, Bob, 'Igor', 2023-03-10, 'Barista', 10), (2, Smith, 'Jones', 2023-01-01, 'Cashier', 11), (3, Cheezeit, 'Mogeo', 2022-01-01, 'Manager', 12) Err Code: 1062. Duplicate entry '1' for key 'employee.PRIMARY' 0.000 sec
 33 17:33:06 INSERT INTO supplier VALUES (20, 'Coffee Supplier', 'Peru', 'jimbob@coffee.com'), (21, 'The Beany Best Coffee', 'Canada', 'Ray', 'ray@coffeebean.com'), (22, 'Roasted Delight', 'Brazil', 'Jeff', 'jeff@yuncoffee.com') 3 rows affected Records: 3 Duplicates: 0 Warnings: 0 0.016 sec
 34 17:33:06 INSERT INTO coffee VALUES (100, 10, 20, 'Javaing me Crazy!', 12.99), (101, 11, 21, 'Vanilla Latte', 10.99), (102, 12, 22, 'Cold Brew Dude', 15.99) 3 rows affected Records: 3 Duplicates: 0 Warnings: 0 0.015 sec

Object Info Session

5:33 PM 3/10/2023

Part B.2 Populating tables: 3 rows of data are inserted successfully into each table as shown on the bottom of the screenshot

TINYWOW

The screenshot shows the SSMS interface with the following details:

- Schemas:** The left pane displays the schema structure for the database 'c170'. It includes objects like tables (coffee, coffee_shop, employee, supplier), views (name), and stored procedures (sakila). A specific view named 'name' is expanded, showing columns: employee_id, first_name, last_name, hire_date, job_id, and employee_full_name.
- SQL File 3***: A code editor window at the top contains the following SQL script:

```
1 CREATE VIEW name AS
2 Select *,CONCAT(first_name," ",last_name) as employee_full_name
3 FROM employee
4
```
- Output Window:** The bottom half of the screen shows the execution history of various SQL statements. Each entry includes a timestamp, the statement, and its outcome (Message, Duration, Error Code).

Time	Action	Message	Duration
27.32:10	INSERT INTO coffee_shop VALUES (12, 'Crazy Coffee', 'Spring', 'TX'), (11, 'Coffee coffee coffee', 'Las Vegas', 'NV'), (10, 'Just Right Coffee', 'Las Cruces', 'NM')	3 rows(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.016 sec
28.32:11	INSERT INTO employee VALUES (1, 'Bob', 'Igor', '2023-03-10', 'Barista'), (10, (2, 'Smith', 'Jones', '2023-01-01', 'Casher'), 11, (3, 'Cheat', 'Mope', '2022-01-01', 'Manager'), 12)	3 rows(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.016 sec
29.32:11	INSERT INTO supplier VALUES (20, 'Coffee Supplier', 'Pew', 'JmBob@coffee.com'), (21, 'The Beary Red Coffee', 'Canada', 'Ray', 'ray@coffeebearen.com'), (22, 'Roasted Delight', 'Brazil', 'Jeff', 'jeff@yuncoffee.com')	Error Code: 1146 Table 'c170.supplier' doesn't exist	0.000 sec
30.32:19	INSERT INTO coffee_shop VALUES (12, 'Crazy Coffee', 'Spring', 'TX'), (11, 'Coffee coffee coffee', 'Las Vegas', 'NV'), (10, 'Just Right Coffee', 'Las Cruces', 'NM')	Error Code: 1052 Duplicate entry '12' for key 'coffee_shop.PRIMARY'	0.000 sec
31.32:22	INSERT INTO coffee_shop VALUES (12, 'Crazy Coffee', 'Spring', 'TX'), (11, 'Coffee coffee coffee', 'Las Vegas', 'NV'), (10, Just Right Coffee', 'Las Cruces', 'NM')	Error Code: 1052 Duplicate entry '12' for key 'coffee_shop.PRIMARY'	0.000 sec
32.33:02	INSERT INTO employee VALUES (1, 'Bob', 'Igor', '2023-03-10', 'Barista'), (10, (2, 'Smith', 'Jones', '2023-01-01', 'Casher'), 11, (3, 'Cheat', 'Mope', '2022-01-01', 'Manager'), 12)	Error Code: 1052 Duplicate entry '1' for key 'employee.PRIMARY'	0.000 sec
33.33:05	INSERT INTO supplier VALUES (20, 'Coffee Supplier', 'Pew', 'JmBob@coffee.com'), (21, 'The Beary Red Coffee', 'Canada', 'Ray', 'ray@coffeebearen.com'), (22, 'Roasted Delight', 'Brazil', 'Jeff', 'jeff@yuncoffee.com')	3 rows(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.016 sec
34.33:05	INSERT INTO coffee VALUES (10, 10, 20, 'Jenning me Crazy!', 12.99), (10, 11, 21, 'Vanilla Latte', 10.99), (10, 12, 22, 'Cold Brew Dude', 15.99)	3 rows(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.015 sec
35.34:14	CREATE VIEW name AS Select *,CONCAT(first_name," ",last_name) as employee_full_name FROM employee	Error Code: 1054 Unknown column 'first_name' in field list	0.016 sec
36.38:33	ALTER TABLE employee RENAME first_name TO first_name	Error Code: 1054 You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'first_name' at line 2	0.000 sec
37.38:34	ALTER TABLE employee RENAME COLUMN first_name TO first_name	0 rows(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.063 sec
38.38:33	CREATE VIEW name AS Select *,CONCAT(first_name," ",last_name) as employee_full_name FROM employee	0 rows(s) affected	0.110 sec

PART B.3: Create View. View (name) is successfully created as noted by database response and the update to the schema to the left.

MySQL Workbench

Mysql@127.0.0.1:3306 Local instance MySQL80

File Edit View Query Database Server Tools Help

Navigator SQL File 3* c170-1 c170 SQL File 7* Query 2

Schemas

Tables

Columns

coffee_id
shop_id
supplier_id
coffee_name
price_per_pound

Indexes

PRIMARY
shop_id
supplier_id
coffee_name

Foreign Keys

Triggers

coffee_shop
employee
supplier

Views

name

employee_id
first_name
last_name
hire_date
job_title
shop_id
employee_full_name

Stored Procedures

Functions

Skills

sys

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Index: idx_coffee_name

Definition:

Type	BTREE
Unique	No
Visible	Yes
Columns	coffee_name

Output

#	Time	Action	Message	Duration / Fetch
28	17:32:10	INSERT INTO employee VALUES (1, 'Bob', 'Igor', '2023-03-10', 'Barista', 10), (2, 'Smith', 'Jones', '2023-01-01', 'Cashier', 11), (3, 'Cheats', 'Mopes', '2022-01-01', 'Manager', 12)	3 row(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.016 sec
29	17:32:11	INSERT INTO supplier VALUES (20, 'Coffee Supplier', 'Peru', 'Jmbob@coffee.com'), (21, 'The Beany Best Coffee', 'Canada', 'Ray', 'ray@coffeebean.com')	Error Code: 1146 Table 'c170.supplier' doesn't exist	0.000 sec
30	17:32:19	INSERT INTO coffee_shop VALUES (12, 'Crappy Coffee', 'Spring', 'TX'), (11, 'Coffee coffee coffee!', 'Las Vegas', 'NV')	Error Code: 1062 Duplicate entry '12' for key coffee_shop.PRIMARY	0.000 sec
31	17:32:25	INSERT INTO coffee_shop VALUES (12, 'Crappy Coffee', 'Spring', 'TX'), (11, 'Coffee coffee coffee!', 'Las Vegas', 'NV')	Error Code: 1062 Duplicate entry '12' for key coffee_shop.PRIMARY	0.000 sec
32	17:33:01	INSERT INTO employee VALUES (1, 'Bob', 'Igor', '2023-03-10', 'Barista', 10), (2, 'Smith', 'Jones', '2023-01-01', 'Cashier', 11), (3, 'Cheats', 'Mopes', '2022-01-01', 'Manager', 12)	Error Code: 1062 Duplicate entry '1' for key employee.PRIMARY	0.000 sec
33	17:33:05	INSERT INTO supplier VALUES (20, 'Coffee Supplier', 'Peru', 'Jmbob@coffee.com'), (21, 'The Beany Best Coffee', 'Canada', 'Ray', 'ray@coffeebean.com')	Error Code: 1062 Duplicate entry '20' for key supplier.PRIMARY	0.016 sec
34	17:33:08	INSERT INTO coffee VALUES (100, 10, 20, 'Java me Crayf', 12, 99), (101, 11, 21, 'Vanilla Latte', 10, 99), (102, 12, 22, 'Cold Brew Dula', 15, 99)	Error Code: 1062 Duplicate entry '100' for key coffee.PRIMARY	0.016 sec
35	18:31:42	CREATE VIEW name AS Select *,CONCAT(first_name,' ',last_name) as employee_full_name FROM employee	Error Code: 1054 Unknown column 'first_name' in field list	0.016 sec
36	18:30:08	ALTER TABLE employee RENAME first_name to first_name	Error Code: 1054 You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'first_name' at line 2	0.000 sec
37	18:33:24	ALTER TABLE employee RENAME COLUMN first_name to first_name	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.063 sec
38	18:33:32	CREATE VIEW name AS Select *,CONCAT(first_name,' ',last_name) as employee_full_name FROM employee	0 row(s) affected	0.110 sec
39	18:34:34	SELECT employee_full_name FROM `c170`.`name` LIMIT 0, 1000	3 row(s) affected	0.000 rows / 0.000 sec
40	18:37:24	CREATE INDEX idx_coffee_name ON coffee (coffee_name)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.125 sec

Object Info Session

Q Search 6:37 PM 3/1/2023

PART B.4: Create index. Index (idx_coffee_name) is created as shown at the bottom by the database response and by the schema on the left

MySQL Workbench

Myd@127.0.0.1:3306 Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator Schemas SQL File 3* c170-1 c170 SQL File 7* Query 2 SQL File 8* SQL File 9* SQL File 10*

Filter objects

Schemas

- c170
 - Tables
 - coffee
 - Columns
 - PK PRIMARY
 - shop_id
 - supplier_id
 - idx_coffee_n
 - Foreign Keys
 - Triggers
 - coffee_shop
 - Columns
 - shop_id
 - shop_name
 - city
 - state
 - Indexes
 - Foreign Keys
 - Triggers
 - employee
 - Columns
 - employee_id
 - first_name
 - last_name
 - hire_date
 - job_title
 - shop_id
 - Indexes
 - Foreign Keys
 - Triggers
 - supplier
 - Columns
 - supplier_id
 - company_name
 - country
 - sales_contact
 - email
 - Indexes

Administration Schemas Information

Table: employee

Columns:

employee_id	int PK
first_name	varchar(30)
last_name	varchar(30)
hire_date	date
job_title	varchar(30)
shop_id	int

Action Output

#	Time	Action	Message	Duration / Fetch
1	31	17:32:52 INSERT INTO coffee_shop VALUES (12, 'Crazy Coffee', 'Spring', 'TX'), (11, 'Coffee coffee coffee', 'Las Vegas', 'NV'), (10, 'Just Right Coffee', 'Las Cruces', 'NM')	Error Code: 1062. Duplicate entry '12' for key 'coffee_shop PRIMARY'	0.000 sec
2	32	17:33:01 INSERT INTO employee VALUES (1, 'Bob', 'Igor', '2023-03-10', 'Banana', 10, (2, 'Smith', 'Jones', '2023-01-01', 'Cashier', 11), (3, 'Cheeky', 'Mogee', '2022-01-01', 'Manager', 12))	Error Code: 1062. Duplicate entry '1' for key 'employee PRIMARY'	0.000 sec
3	33	17:33:05 INSERT INTO supplier VALUES (20, 'Coffee Supplier', 'Peru', 'JmBob', 'jmbo@coffee.com'), (21, 'The Beaney Best Coffee', 'Canada', 'Ray', 'ray@coffeebean.com'), (22, 'Roasted Delight', 'Brazil', 'Jeff', 'Jeff@yumcoffee.com')	3 row(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.016 sec
4	34	17:33:06 INSERT INTO coffee VALUES (10, 10, 20, 'Java me Crazy!', 12.99), (101, 11, 21, 'Vanilla Latte', 10.99), (102, 12, 22, 'Cold Brew Dude', 15.99)	3 row(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.015 sec
5	35	18:31:42 CREATE VIEW name AS Select *, CONCAT(first_name, " ", last_name) as employee_full_name FROM employee	Error Code: 1054. Unknown column 'first_name' in field list'	0.016 sec
6	36	18:33:08 ALTER TABLE employee RENAME first_name to first_name	Error Code: 1064. You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'first_name' at line 2	0.000 sec
7	37	18:33:26 ALTER TABLE employee RENAME COLUMN first_name to first_name	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.063 sec
8	38	18:33:32 CREATE VIEW name AS Select *, CONCAT(first_name, " ", last_name) as employee_full_name FROM employee	0 row(s) affected	0.110 sec
9	39	18:34:34 SELECT employee_full_name FROM c170.hname LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec
10	40	18:37:24 CREATE INDEX_idx_coffee_name ON coffee(coffee_name)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.125 sec
11	41	18:38:54 SELECT * FROM coffee WHERE price_per_pound > 5.00 LIMIT 0, 1000	Error Code: 1054. Unknown column 'price_per_pound' in 'where clause'	0.000 sec
12	42	18:39:12 SELECT * FROM coffee WHERE price_per_pound > 11.00 LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec
13	43	18:47:13 SELECT cs.shop_name, c.coffee_name, s.company_name FROM coffee_shop cs INNER JOIN coffee c ON cs.shop_id = c.shop_id INNER JOIN supplier s ON c.supplier_id = s.supplier_id LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

Q Search

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Automatic context help is disabled. Use the toolbar t manually get help for the current caret position or to toggle automatic help.

PART B.5: Create SFW query. Query is successfully ran by selecting all columns from the coffee table and filtering rows that only have price_per_pound > 11.99

MySQL Workbench

Mysql@127.0.0.1:3306 Local instance MySQL80

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SQL File 3* c170-1 c170 SQL File 7* Query 2 SQL File 8* SQL File 9* SQL File 10*

Navigator

Schemas

Filter objects

Tables

Columns

```

1 #   SELECT cs.shop_name, c.coffee_name, s.company_name
2   FROM coffee_shop cs
3   INNER JOIN coffee c
4   ON cs.shop_id = c.shop_id
5   INNER JOIN supplier s
6   ON c.supplier_id = s.supplier_id;
7
8

```

Indexes

PRIMARY

shop_id

supplier_id

coffee_name

price_per_poo

Foreign Keys

Triggers

coffee_shop

Columns

- shop_id
- coffee_name
- city
- state

Tables

Foreign Keys

Triggers

employee

Columns

- employee_id
- first_name
- last_name
- hire_date
- job_title
- shop_id

Indexes

Foreign Keys

Triggers

supplier

Columns

- supplier_id
- company_name
- country
- sales_contact
- email

Indexes

Administration Schemas

Information

Table: employee

Columns:

employee_id	int PK
first_name	varchar(30)
last_name	varchar(30)
hire_date	date
job_title	varchar(30)
shop_id	int

Action Output

#	Time	Action	Message	Duration / Fetch
0	31.173252	INSERT INTO coffee_shop VALUES (12, 'Crazy Coffee', 'Spring', 'TX'), (11, 'Coffee coffee coffee!', 'Las Vegas', 'NV'), (10, 'Just Right Coffee', 'Las Cruces', 'NM')	Error Code: 1062: Duplicate entry '12' for key 'coffee_shop.PRIMARY'	0.000 sec
1	31.173301	INSERT INTO employee VALUES (1, 'Bob', 'Iggy', '2023-01-10', 'Barista', 10), (2, 'Smith', 'Jones', '2022-01-01', 'Caterer', 11), (3, 'Cheat', 'Mopee', '2022-01-01', 'Manager', 12)	Error Code: 1062: Duplicate entry '1' for key 'employee.PRIMARY'	0.000 sec
2	31.173305	INSERT INTO supplier VALUES (20, 'Coffee Supply', 'Peru', 'AmboB', 'jmbob@coffee.com'), (21, 'The Beaney Best Coffee', 'Canada', 'Ray', 'ray@coffeebean.com'), (22, 'Roasted Delight', 'Brazil', 'Jeff', 'jeff@yuncoffee.com')	3 row(s) affected; Records: 3 Duplicates: 0 Warnings: 0	0.016 sec
3	31.173305	INSERT INTO coffee VALUES (100, 10, 20, 'Java me Crazy!', 12, 99), (101, 11, 21, 'Vanilla Latte', 10, 99), (102, 12, 22, 'Cold Brew Dude', 15, 99)	3 row(s) affected; Records: 3 Duplicates: 0 Warnings: 0	0.015 sec
4	35.183142	CREATE VIEW name AS Select *, CONCAT(first_name, " ", last_name) as employee_full_name FROM employee	Error Code: 1054: Unknown column 'last_name' in 'field list'	0.016 sec
5	36.103308	ALTER TABLE employee RENAME full_name to first_name	Error Code: 1064: You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'to first_name' at line 2	0.000 sec
6	37.103324	ALTER TABLE employee RENAME COLUMN first_name to first_name	0 row(s) affected; Records: 0 Duplicates: 0 Warnings: 0	0.003 sec
7	38.183532	CREATE VIEW name AS Select *, CONCAT(first_name, " ", last_name) as employee_full_name FROM employee	0 row(s) affected	0.110 sec
8	39.183434	SELECT employee_full_name FROM `c170` WHERE LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec
9	40.183724	CREATE INDEX idx_coffee_name ON coffee (coffee_name)	0 row(s) affected; Records: 0 Duplicates: 0 Warnings: 0	0.125 sec
10	41.103050	SELECT * FROM coffee WHERE price_per_poo > 5.00 LIMIT 0, 1000	Error Code: 1054: Unknown column 'price_per_poo' in 'where clause'	0.000 sec
11	42.183912	SELECT * FROM coffee WHERE price_per_poo > 10.00 LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec
12	43.184713	SELECT cs.shop_name, c.coffee_name, s.company_name FROM coffee_shop cs INNER JOIN coffee c ON cs.shop_id = c.shop_id INNER JOIN supplier s ON c.supplier_id = s.supplier_id LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

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PART B.6: Create a join query linking 3 tables. In this query, 3 tables, coffee_shop, coffee, and supplier are linked using an inner join on all 3 tables. The results appear in the middle.