1. Develop SQL code to create *each* table as specified in the attached "Jaunty Coffee Co. ERD" by doing the following:

a. Provide the SQL code you wrote to create *all* the tables.
b. Demonstrate that you tested your code by providing a screenshot showing your SQL commands and the database server's response.

B1

```sql
CREATE TABLE COFFEE_SHOP (
  shop_id INT,
  shop_name VARCHAR(50),
  city VARCHAR(50),
  state CHAR(2),
  PRIMARY KEY (shop_id)
  );

 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(shop_id)
 );

 CREATE TABLE SUPPLIER(
  supplier_id INT,
  company_name VARCHAR(50),
  country VARCHAR(30),
  sales_contact_name VARCHAR(60),
  email VARCHAR(50),
  PRIMARY KEY (supplier_id)
 );

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(shop_id),
  FOREIGN KEY (supplier_id) REFERENCES SUPPLIER(supplier_id)
 );

```

Develop SQL code to populate *each* table in the database design document by doing the following:

Note: This data is not provided. You will be fabricating the data for this step.

a. Provide the SQL code you wrote to populate the tables with *at least* **three** rows of data in *each* table.
b. Demonstrate that you tested your code by providing a screenshot showing your SQL commands and the database server's response.

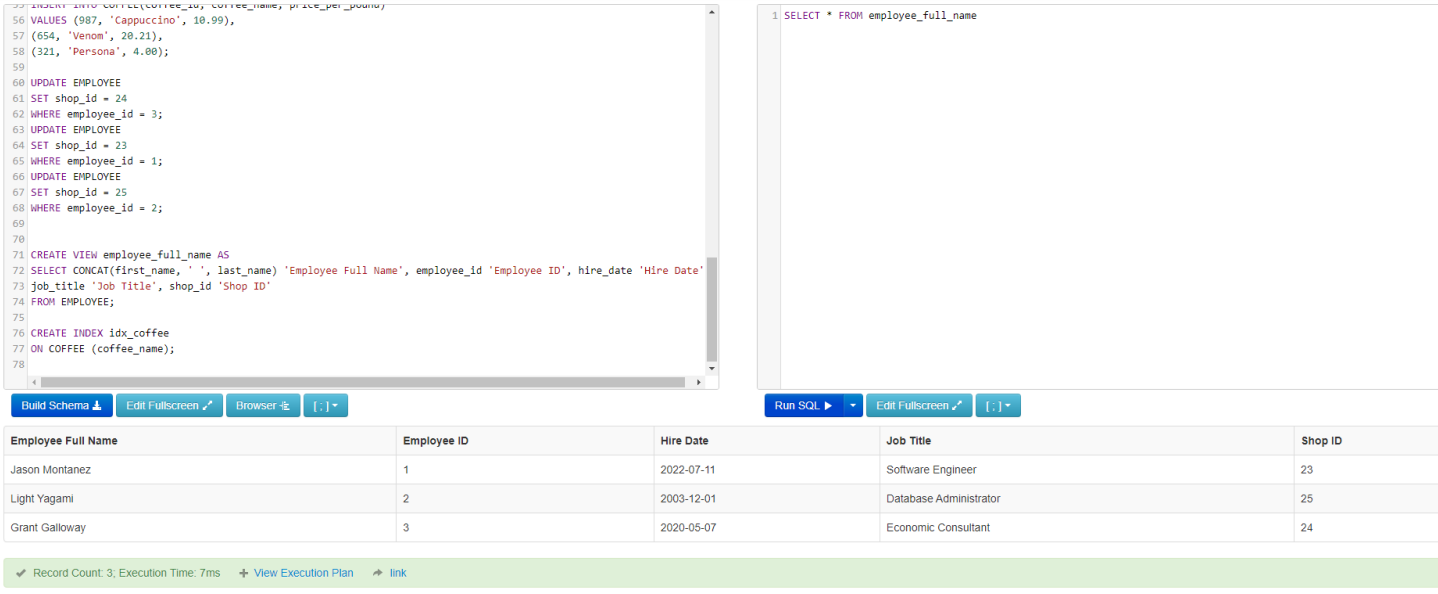
B2

```
INSERT INTO EMPLOYEE (employee_id, first_name, last_name, hire_date, job_title)
VALUES (1, 'Jason', 'Montanez', '2022-07-11', 'Software Engineer'),
(2, 'Light', 'Yagami', '2003-12-01', 'Database Administrator'),
(3, 'Grant', 'Galloway', '2020-5-07', 'Economic Consultant');

INSERT INTO COFFEE_SHOP (shop_id, shop_name, city, state)
VALUES (24, 'Phoenix Jaunty Coffee Co.', 'Phoenix', 'AZ'),
(23, 'Spring Hill Jaunty Coffee Co.', 'Spring Hill', 'FL'),
(25, 'Tucson Jaunty Coffee Co.', 'Tucson', 'AZ');

INSERT INTO SUPPLIER(supplier_id, company_name, country, sales_contact_name, email)
VALUES (123, 'Tokyo Bean Co.', 'Japan', 'Ryuk Shinigami', 'shinigamiloveapples@gmail.com'),
(456, 'Peckham Milk Co.', 'United Kingdom', 'Phoenix Valorant', 'claimthecrown@protonmail.com'),
(789, 'Logic\'s Tea Co.', 'United States', 'Sir Robert Bryson Hall II', 'bobbytarantino@yahoo.com');

INSERT INTO COFFEE(coffee_id, coffee_name, price_per_pound)
VALUES (987, 'Cappuccino', 10.99),
(654, 'Venom', 20.21),
(321, 'Persona', 4.00);


```

✔ Schema Ready

3. Develop SQL code to create a view by doing the following:
   a. Provide the SQL code you wrote to create your view. The view should show *all* of the information from the "Employee" table but concatenate *each* employee's first and last name, formatted with a space between the first and last name, into a new attribute called employee_full_name.
   b. Demonstrate that you tested your code by providing a screenshot showing your SQL commands and the database server's response.

B3



```
VALUES (987, 'Cappuccino', 10.99),
(654, 'Venom', 20.21),
(321, 'Persona', 4.00);

UPDATE EMPLOYEE
SET shop_id = 24
WHERE employee_id = 3;
UPDATE EMPLOYEE
SET shop_id = 23
WHERE employee_id = 1;
UPDATE EMPLOYEE
SET shop_id = 25
WHERE employee_id = 2;


CREATE VIEW employee_full_name AS
SELECT CONCAT(first_name, ' ', last_name) 'Employee Full Name', employee_id 'Employee ID', hire_date 'Hire Date'
job_title 'Job Title', shop_id 'Shop ID'
FROM EMPLOYEE;

CREATE INDEX idx_coffee
ON COFFEE (coffee_name);
```

Build Schema | Edit Fullscreen | Browser | [;]

```
SELECT * FROM employee_full_name
```

Run SQL | Edit Fullscreen | [;]

Employee Full Name	Employee ID	Hire Date	Job Title	Shop ID
Jason Montanez	1	2022-07-11	Software Engineer	23
Light Yagami	2	2003-12-01	Database Administrator	25
Grant Galloway	3	2020-05-07	Economic Consultant	24

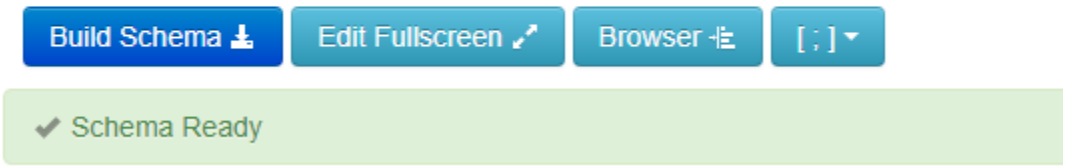
Record Count: 3, Execution Time: 7ms | View Execution Plan | link

4. Develop SQL code to create an index on the coffee_name field by doing the following:
   a. Provide the SQL code you wrote to create your index on the coffee_name field from the "Coffee" table.

b. Demonstrate that you tested your code by providing a screenshot showing your SQL commands and the database server's response.

B4

```
62
63 CREATE INDEX idx_coffee
64 ON COFFEE (coffee_name);
65
```



5. Develop SQL code to create an SFW (SELECT–FROM–WHERE) query for *any* of your tables or views by doing the following:
   a. Provide the SQL code you wrote to create your SFW query.
   b. Demonstrate that you tested your code by providing a screenshot showing your SQL commands and the database server's response.

B5

```
(2, 'Light', 'Yagami', '2003-12-01', 'Database Administrator'),
(3, 'Grant', 'Galloway', '2020-5-07', 'Economic Consultant');

INSERT INTO COFFEE_SHOP (shop_id, shop_name, city, state)
VALUES (24, 'Phoenix Jaunty Coffee Co.', 'Phoenix', 'AZ'),
(23, 'Spring Hill Jaunty Coffee Co.', 'Spring Hill', 'FL'),
(25, 'Tucson Jaunty Coffee Co.', 'Tucson', 'AZ');

INSERT INTO SUPPLIER(supplier_id, company_name, country, sales_contact_name, email)
VALUES (123, 'Tokyo Bean Co.', 'Japan', 'Ryuk Shinigami', 'shinigamiloveapples@gmail.com'),
(456, 'Peckham Milk Co.', 'United Kingdom', 'Phoenix Valorant', 'claimthecrown@protonmail.com'),
(789, 'Logic\'s Tea Co.', 'United States', 'Sir Robert Bryson Hall II', 'bobbytarantino@yahoo.com');

INSERT INTO COFFEE(coffee_id, coffee_name, price_per_pound)
VALUES (987, 'Cappuccino', 10.99),
(654, 'Venom', 20.21),
(321, 'Persona', 4.00);

CREATE VIEW employee_full_name AS
SELECT CONCAT(first_name, ' ', last_name) FROM EMPLOYEE;

CREATE INDEX idx_coffee
ON COFFEE (coffee_name);
```

```
SELECT * FROM EMPLOYEE WHERE employee_id >= 1;
```

Build Schema | Edit Fullscreen | Browser | [;] | Run SQL | Edit Fullscreen | [;]

employee_id	first_name	last_name	hire_date	job_title	shop_id
1	Jason	Montanez	2022-07-11	Software Engineer	(null)
2	Light	Yagami	2003-12-01	Database Administrator	(null)
3	Grant	Galloway	2020-05-07	Economic Consultant	(null)

Record Count: 3; Execution Time: 5ms | View Execution Plan | link

6. Develop SQL code to create a query by doing the following:
   a. Provide the SQL code you wrote to create your table joins query. The query should join together **three** different tables and include attributes from *all* three tables in its output.
   b. Demonstrate that you tested your code by providing a screenshot showing your SQL commands and the database server's response.

B6

```
(2, 'Light', 'Yagami', '2003-12-01', 'Database Administrator'),
(3, 'Grant', 'Galloway', '2020-5-07', 'Economic Consultant');

INSERT INTO COFFEE_SHOP (shop_id, shop_name, city, state)
VALUES (24, 'Phoenix Jaunty Coffee Co.', 'Phoenix', 'AZ'),
(23, 'Spring Hill Jaunty Coffee Co.', 'Spring Hill', 'FL'),
(25, 'Tucson Jaunty Coffee Co.', 'Tucson', 'AZ');

INSERT INTO SUPPLIER(supplier_id, company_name, country, sales_contact_name, email)
VALUES (123, 'Tokyo Bean Co.', 'Japan', 'Ryuk Shinigami', 'shinigamiloveapples@gmail.com'),
(456, 'Peckham Milk Co.', 'United Kingdom', 'Phoenix Valorant', 'claimthecrown@protonmail.com'),
(789, 'Logic\'s Tea Co.', 'United States', 'Sir Robert Bryson Hall II', 'bobbytarantino@yahoo.com');

INSERT INTO COFFEE(coffee_id, coffee_name, price_per_pound)
VALUES (987, 'Cappuccino', 10.99),
(654, 'Venom', 20.21),
(321, 'Persona', 4.00);

CREATE VIEW employee_full_name AS
SELECT CONCAT(first_name, ' ', last_name) FROM EMPLOYEE;

CREATE INDEX idx_coffee
ON COFFEE (coffee_name);
```

```
SELECT EMPLOYEE.first_name, EMPLOYEE.last_name, COFFEE_SHOP.shop_name, COFFEE_SHOP.city, COFFEE_SHOP.state,
COFFEE.coffee_name, COFFEE.price_per_pound
FROM EMPLOYEE
JOIN COFFEE_SHOP
ON EMPLOYEE.shop_id = COFFEE_SHOP.shop_id
JOIN COFFEE
ON COFFEE_SHOP.shop_id;
```

Build Schema | Edit Fullscreen | Browser | [;] | Run SQL | Edit Fullscreen | [;]

Record Count: 0; Execution Time: 3ms | View Execution Plan | link

id	select_type	table	type	possible_keys	key	key_len	ref	rows	filtered	Extra
1	SIMPLE	COFFEE	ALL					3	100.00	
1	SIMPLE	EMPLOYEE	range	shop_id	shop_id	5		1	100.00	Using index condition; Using join buffer (Block Nested Loop)
1	SIMPLE	COFFEE_SHOP	eq_ref	PRIMARY	PRIMARY	4	db_9_b6a2750.EMPLOYEE.shop_id	1	100.00	Using where