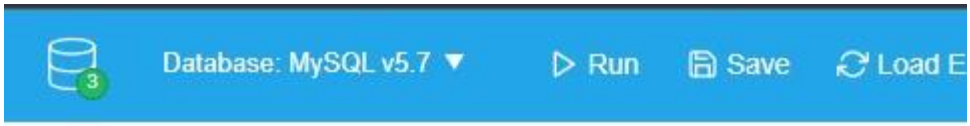
SQL code to create *each* table as specified in the "Coffee Co ER Diagram Sample" by doing the following:



Schema SQL

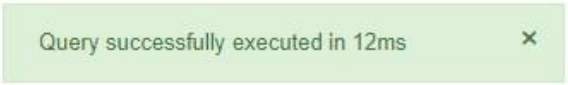
```sql
DROP TABLE IF EXISTS COFFEE_SHOP;
DROP TABLE IF EXISTS EMPLOYEE;
DROP TABLE IF EXISTS SUPPLIER;
DROP TABLE IF EXISTS COFFEE;

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

CREATE TABLE EMPLOYEE(
    employee_id int PRIMARY KEY,
    first_name varchar(30),
    last_name varchar(30),
    hire_date date,
    job_title VARCHAR(30),
    shop_id INT REFERENCES COFFEE_SHOP(shop_id)
);

CREATE TABLE SUPPLIER(
    supplier_id INT PRIMARY KEY,
    company_name VARCHAR(50),
    country VARCHAR(30),
    sales_contact_name VARCHAR(60),
    email VARCHAR(50) NOT NULL
);

CREATE TABLE COFFEE(
    coffee_id INT PRIMARY KEY,
    shop_id INT REFERENCES COFFEE_SHOP(shop_id),
    supplier_id INT REFERENCES SUPPLIER(supplier_id),
    coffee_name VARCHAR(30),
    price_per_pound NUMERIC(5,2)
);
```



SQL code to populate *each* table in the database design by adding in test values

```
INSERT INTO COFFEE_SHOP (shop_id, shop_name, city, state)
VALUES  (1, 'Cafe East', 'New York', 'NY'),
        (2, 'Cafe North', 'Chicago', 'IL'),
        (3, 'Cafe West', 'Los Angeles', 'CA');

INSERT INTO EMPLOYEE (employee_id, first_name, last_name, hire_date, job_title, shop_id)
VALUES  (1, 'John', 'Smith', '2021-01-20', 'General Manager', 1),
        (2, 'Tim', 'Jones', '2021-01-20', 'Cashier', 2),
        (3, 'Susan', 'Nelson', '2021-01-20', 'Supervisor', 3);

INSERT INTO SUPPLIER (supplier_id, company_name, country, sales_contact_name, email)
VALUES  (1, 'Coffee Express', 'USA', 'George', 'george@coffeeexpress.com'),
        (2, 'Colombia Coffee', 'Colombia', 'Peter', 'sales@comlombiacoffee.com'),
        (3, 'Wholesale Brew', 'USA', 'Barbara', 'supplies@wholesalebrew.com');

INSERT INTO COFFEE (coffee_id, shop_id, supplier_id, coffee_name, price_per_pound)
VALUES  (1, 2, 3, 'Mocha', 6.99),
        (2, 1, 2, 'Premium Roast', 9.99),
        (3, 3, 1, 'French Vanilla', 8.25);
```

Query successfully executed in 34ms ×

SQL code to create a view

```
CREATE VIEW Employee_view as
select employee_id, first_name+' '+last_name as employee_full_name, hire_date, job_title, shop_id
from EMPLOYEE;
```

Query successfully executed in 29ms ×

SQL code to create an index on the coffee name field by doing the following: a.

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

Query successfully executed in 63ms ×

SQL code to create an SFW (SELECT–FROM–WHERE) query for *any* of your tables or views by doing the following:

Query #1 Execution time: 1ms

first_name	last_name	hire_date	job_title
John	Smith	2021-01-20	General Manager
Tim	Jones	2021-01-20	Cashier
Susan	Nelson	2021-01-20	Supervisor

```
1 select first_name, last_name, hire_date, job_title
2 from EMPLOYEE
3 where hire_date = '2021-01-20'
```

b.

SQL code to create an SFW query using joins to combine tables:

```
1 select cs.shop_name, c.coffee_name, c.price_per_pound, s.company_name, s.sales_contact_name
2 from COFFEE c
3 left join COFFEE_SHOP as cs on c.shop_id = cs.shop_id
4 left join SUPPLIER as s on c.supplier_id = s.supplier_id
```

Query #1 Execution time: 0ms

shop_name	coffee_name	price_per_pound	company_name	sales_contact_name
Cafe East	Premium Roast	9.99	Colombia Coffee	Peter
Cafe North	Mocha	6.99	Wholesale Brew	Barbara
Cafe West	French Vanilla	8.25	Coffee Express	George