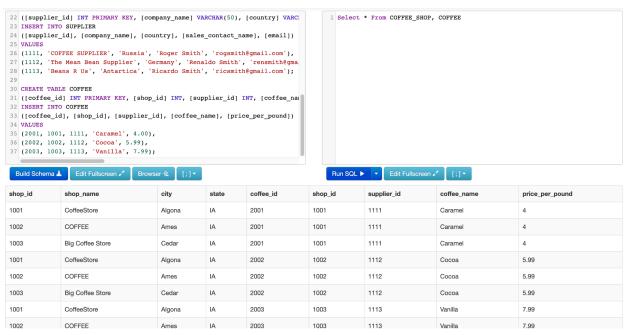## B1

```
 1  CREATE TABLE COFFEE_SHOP
 2  ([shop_id] INT PRIMARY KEY, [shop_name] VARCHAR(50), [city] VARCHAR(50), [sta
 3
 4  CREATE TABLE EMPLOYEE
 5  ([employee_id] INT PRIMARY KEY, [first_name] VARCHAR(30), [last_name] VARCHAR
 6
 7  CREATE TABLE SUPPLIER
 8  ([supplier_id] INT PRIMARY KEY, [company_name] VARCHAR(50), [country] VARCHAR
 9
10  CREATE TABLE COFFEE
11  ([coffee_id] INT PRIMARY KEY, [shop_id] INT, [supplier_id] INT, [coffee_name]
```

Build Schema ⬇ **Edit Fullscreen ⤢** **Browser ⇥** **[;] ▾**

✔ Schema Ready

B2

```
22  ([supplier_id] INT PRIMARY KEY, [company_name] VARCHAR(50), [country] VARC
23  INSERT INTO SUPPLIER
24  ([supplier_id], [company_name], [country], [sales_contact_name], [email])
25  VALUES
26  (1111, 'COFFEE SUPPLIER', 'Russia', 'Roger Smith', 'rogsmith@gmail.com'),
27  (1112, 'The Mean Bean Supplier', 'Germany', 'Renaldo Smith', 'rensmith@gma
28  (1113, 'Beans R Us', 'Antartica', 'Ricardo Smith', 'ricsmith@gmail.com');
29
30  CREATE TABLE COFFEE
31  ([coffee_id] INT PRIMARY KEY, [shop_id] INT, [supplier_id] INT, [coffee_nam
32  INSERT INTO COFFEE
33  ([coffee_id], [shop_id], [supplier_id], [coffee_name], [price_per_pound])
34  VALUES
35  (2001, 1001, 1111, 'Caramel', 4.00),
36  (2002, 1002, 1112, 'Cocoa', 5.99),
37  (2003, 1003, 1113, 'Vanilla', 7.99);
```

```
 1  Select * From COFFEE_SHOP, COFFEE
```

Build Schema ⬇ **Edit Fullscreen ⤢** **Browser ⇥** **[;] ▾**   **Run SQL ▶ ▾** **Edit Fullscreen ⤢** **[;] ▾**

shop_id	shop_name	city	state	coffee_id	shop_id	supplier_id	coffee_name	price_per_pound
1001	CoffeeStore	Algona	IA	2001	1001	1111	Caramel	4
1002	COFFEE	Ames	IA	2001	1001	1111	Caramel	4
1003	Big Coffee Store	Cedar	IA	2001	1001	1111	Caramel	4
1001	CoffeeStore	Algona	IA	2002	1002	1112	Cocoa	5.99
1002	COFFEE	Ames	IA	2002	1002	1112	Cocoa	5.99
1003	Big Coffee Store	Cedar	IA	2002	1002	1112	Cocoa	5.99
1001	CoffeeStore	Algona	IA	2003	1003	1113	Vanilla	7.99
1002	COFFEE	Ames	IA	2003	1003	1113	Vanilla	7.99

B3

```
27 (1112, 'The Mean Bean Supplier', 'Germany', 'Renaldo Smith', 'rensmith@gmai
28 (1113, 'Beans R Us', 'Antartica', 'Ricardo Smith', 'ricsmith@gmail.com');
29
30 CREATE TABLE COFFEE
31 ([coffee_id] INT PRIMARY KEY, [shop_id] INT, [supplier_id] INT, [coffee_nam
32 INSERT INTO COFFEE
33 ([coffee_id], [shop_id], [supplier_id], [coffee_name], [price_per_pound])
34 VALUES
35 (2001, 1001, 1111, 'Caramel', 4.00),
36 (2002, 1002, 1112, 'Cocoa', 5.99),
37 (2003, 1003, 1113, 'Vanilla', 7.99);
38
39 CREATE VIEW EmpView AS SELECT
40 ([first_name]+ ' ' + [last_name]) as 'employee_full_name',
41 [employee_id], [hire_date], [job_title], [shop_id]
42 FROM Employee;
```

Build Schema ⬇   Edit Fullscreen ⤢   Browser ⬛   [;] ▾

✔ Schema Ready

B4

```
30 CREATE TABLE COFFEE
31 ([coffee_id] INT PRIMARY KEY, [shop_id] INT, [supplier_id] INT, [coffee_nam
32 INSERT INTO COFFEE
33 ([coffee_id], [shop_id], [supplier_id], [coffee_name], [price_per_pound])
34 VALUES
35 (2001, 1001, 1111, 'Caramel', 4.00),
36 (2002, 1002, 1112, 'Cocoa', 5.99),
37 (2003, 1003, 1113, 'Vanilla', 7.99);
38
39 CREATE VIEW EmpView AS SELECT
40 ([first_name]+ ' ' + [last_name]) as 'employee_full_name',
41 [employee_id], [hire_date], [job_title], [shop_id]
42 FROM Employee;
43
44 CREATE index CNameIndex
45 on COFFEE (coffee_name);
```

Build Schema ⬇ **Edit Fullscreen** ↙ **Browser** ⊞ **[;] ▾**

✔ Schema Ready

B5

```
1  CREATE TABLE COFFEE_SHOP
2  ([shop_id] INT PRIMARY KEY, [shop_name] VARCHAR(50), [city] VARCHAR(50), [
3
4  INSERT INTO COFFEE_SHOP
5  ([shop_id], [shop_name], [city], [state])
6  VALUES
7  (1001, 'CoffeeStore', 'Algona', 'IA'),
8  (1002, 'COFFEE', 'Ames', 'IA'),
9  (1003, 'Big Coffee Store', 'Cedar', 'IA');
10
11 CREATE TABLE EMPLOYEE
12 ([employee_id] INT PRIMARY KEY, [first_name] VARCHAR(30), [last_name] VARC
13 INSERT INTO EMPLOYEE
14 ([employee_id], [first_name], [last_name], [hire_date], [job_title], [shop_
15 VALUES
16 (1011, 'Reginald', 'Smith', '1990-10-14', 'manager', 1001),
17
```

```
1 Select *
2 From COFFEE_SHOP
3 Where state = 'IA'
```

Build Schema ⬇ **Edit Fullscreen** ↙ **Browser** ⊞ **[;] ▾**

Run SQL ▶ ▾ **Edit Fullscreen** ↙ **[;] ▾**

shop_id	shop_name	city	state
1001	CoffeeStore	Algona	IA
1002	COFFEE	Ames	IA
1003	Big Coffee Store	Cedar	IA

✔ Record Count: 3; Execution Time: 23ms   ✛ View Execution Plan   ↱ link

B6

```
 1  CREATE TABLE COFFEE_SHOP
 2  ([shop_id] INT PRIMARY KEY, [shop_name] VARCHAR(50), [city] VARCHAR(50), [s
 3
 4  INSERT INTO COFFEE_SHOP
 5  ([shop_id], [shop_name], [city], [state])
 6  VALUES
 7  (1001, 'CoffeeStore', 'Algona', 'IA'),
 8  (1002, 'COFFEE', 'Ames', 'IA'),
 9  (1003, 'Big Coffee Store', 'Cedar', 'IA');
10
11  CREATE TABLE EMPLOYEE
12  ([employee_id] INT PRIMARY KEY, [first_name] VARCHAR(30), [last_name] VARCH
13  INSERT INTO EMPLOYEE
14  ([employee_id], [first_name], [last_name], [hire_date], [job_title], [shop_
15  VALUES
16  (1011, 'Reginald', 'Smith', '1990-10-14', 'manager', 1001),
17
```

```
 1  SELECT
 2  EMPLOYEE.shop_id,
 3  COFFEE_SHOP.city,
 4  COFFEE_SHOP.state,
 5  COFFEE.coffee_name
 6  FROM EMPLOYEE
 7  INNER JOIN COFFEE_SHOP ON COFFEE_SHOP.shop_id = EMPLOYEE.shop_id
 8  INNER JOIN COFFEE ON COFFEE.shop_id = EMPLOYEE.shop_id
 9  WHERE job_title = 'bread guy';
```

Build Schema ⬇ | Edit Fullscreen ⤢ | Browser ⬓ | [;] ▾   Run SQL ▶ | ▾ | Edit Fullscreen ⤢ | [;] ▾

shop_id	city	state	coffee_name
1003	Cedar	IA	Vanilla

✔ Record Count: 1; Execution Time: 15ms   ✛ View Execution Plan   ➔ link

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

INSERT INTO COFFEE_SHOP
([shop_id], [shop_name], [city], [state])
VALUES
(1001, 'CoffeeStore', 'Algona', 'IA'),
(1002, 'COFFEE', 'Ames', 'IA'),
(1003, 'Big Coffee Store', 'Cedar', 'IA');

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, FOREIGN KEY (shop_id)
REFERENCES COFFEE_SHOP (shop_id));
INSERT INTO EMPLOYEE
([employee_id], [first_name], [last_name], [hire_date], [job_title], [shop_id])
VALUES
(1011, 'Reginald', 'Smith', '1990-10-14', 'manager', 1001),
(1012, 'Ralph', 'Smith', '2000-10-14', 'coffee maker', 1002),
(1013, 'Roscar', 'Smith', '2010-11-11', 'bread guy', 1003);

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);
INSERT INTO SUPPLIER
([supplier_id], [company_name], [country], [sales_contact_name], [email])
VALUES
(1111, 'COFFEE SUPPLIER', 'Russia', 'Roger Smith', 'rogsmith@gmail.com'),
(1112, 'The Mean Bean Supplier', 'Germany', 'Renaldo Smith', 'rensmith@gmail.com'),
(1113, 'Beans R Us', 'Antartica', 'Ricardo Smith', 'ricsmith@gmail.com');

CREATE TABLE COFFEE
([coffee_id] INT PRIMARY KEY, [shop_id] INT, [supplier_id] INT, [coffee_name] VARCHAR(30), [price_per_pound] NUMERIC(5,2), FOREIGN KEY (shop_id) REFERENCES COFFEE_SHOP (shop_id), FOREIGN KEY (supplier_id) REFERENCES SUPPLIER (supplier_id));
INSERT INTO COFFEE
([coffee_id], [shop_id], [supplier_id], [coffee_name], [price_per_pound])
VALUES
(2001, 1001, 1111, 'Caramel', 4.00),
(2002, 1002, 1112, 'Cocoa', 5.99),
(2003, 1003, 1113, 'Vanilla', 7.99);

CREATE VIEW EmpView AS SELECT
([first_name]+ ' ' + [last_name]) as 'employee_full_name',
[employee_id], [hire_date], [job_title], [shop_id]
FROM Employee;

CREATE index CNameIndex
on COFFEE (coffee_name);