

PART B

BY SETH JOKINEN

Code to Create + Populate Tables

```
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 AUTO_INCREMENT,
```

```
    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)
```

```
);
```

```
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,
```

```

supplier_id INT,

coffee_name VARCHAR(30),

price_per_pound NUMERIC(5,2),

FOREIGN KEY (shop_id) REFERENCES Coffee_Shop(shop_id)

ON UPDATE CASCADE

ON DELETE CASCADE,

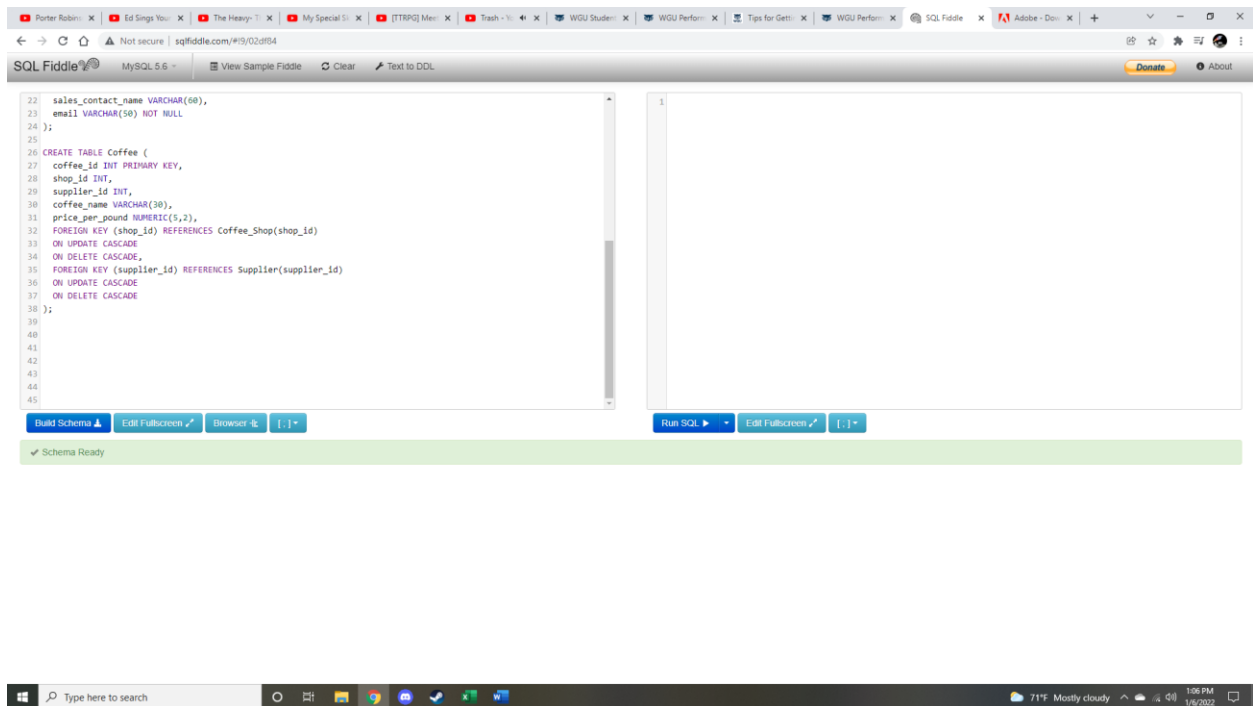
FOREIGN KEY (supplier_id) REFERENCES Supplier(supplier_id)

ON UPDATE CASCADE

ON DELETE CASCADE

);

```



```

INSERT INTO Coffee_Shop (shop_id, shop_name, city, state)

```

```

VALUES (1, 'The Coffee Shop', 'That City', 'ID'),

```

```

      (2, 'The Propane Shop', 'Arlen', 'TX'),

```

```

      (3, 'The Dojo', 'Tokyo', 'JP');

```

```

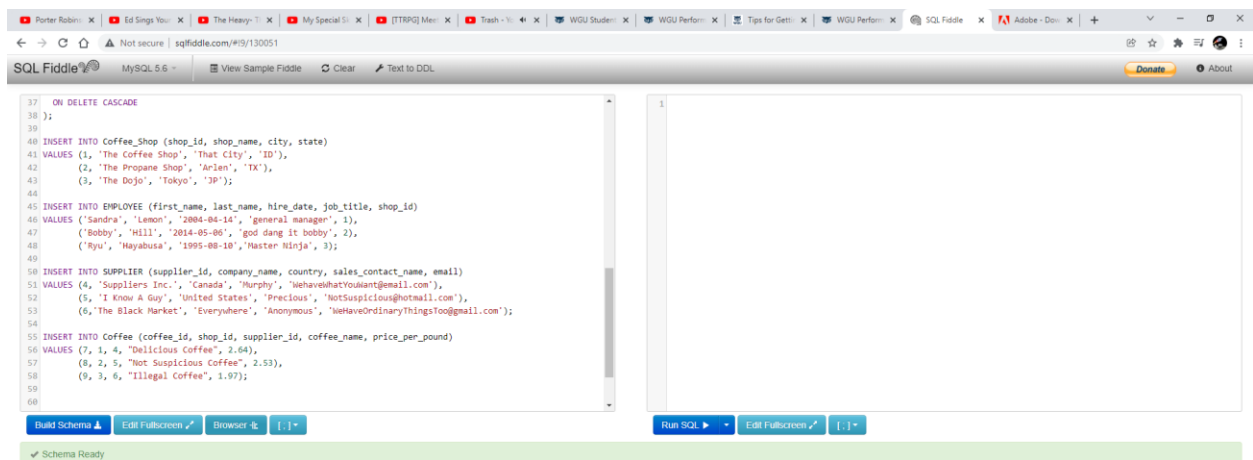
INSERT INTO EMPLOYEE (first_name, last_name, hire_date, job_title, shop_id)

```

```
VALUES ('Sandra', 'Lemon', '2004-04-14', 'general manager', 1),  
('Bobby', 'Hill', '2014-05-06', 'god dang it bobby', 2),  
('Ryu', 'Hayabusa', '1995-08-10', 'Master Ninja', 3);
```

```
INSERT INTO SUPPLIER (supplier_id, company_name, country, sales_contact_name, email)  
VALUES (4, 'Suppliers Inc.', 'Canada', 'Murphy', 'WehaveWhatYouWant@email.com'),  
(5, 'I Know A Guy', 'United States', 'Precious', 'NotSuspicious@hotmail.com'),  
(6, 'The Black Market', 'Everywhere', 'Anonymous', 'WeHaveOrdinaryThingsToo@gmail.com');
```

```
INSERT INTO Coffee (coffee_id, shop_id, supplier_id, coffee_name, price_per_pound)  
VALUES (7, 1, 4, "Delicious Coffee", 2.64),  
(8, 2, 5, "Not Suspicious Coffee", 2.53),  
(9, 3, 6, "Illegal Coffee", 1.97);
```



SELECT QUERIES:

SELECT *

FROM Employee;

SELECT *

FROM Coffee_Shop;

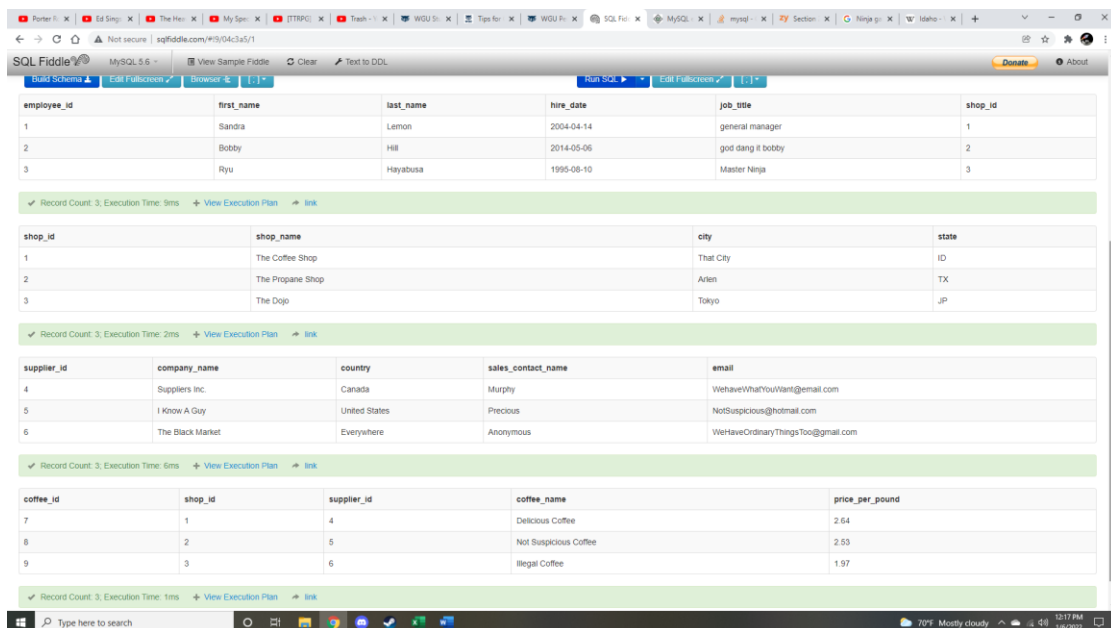
SELECT *

FROM Supplier;

SELECT *

FROM Coffee;

(You can zoom in on this with CTRL + Mouse wheel)



The screenshot shows the SQL Fiddle interface with four queries and their results. Each query is followed by a green bar indicating the record count and execution time.

Query 1: SELECT * FROM Coffee_Shop;

employee_id	first_name	last_name	hire_date	job_title	shop_id
1	Sandra	Lemon	2004-04-14	general manager	1
2	Bobby	Hill	2014-05-06	god dang it bobby	2
3	Ryu	Hayabusa	1995-06-10	Master Ninja	3

Record Count: 3, Execution Time: 1ms

Query 2: SELECT * FROM Shop;

shop_id	shop_name	city	state
1	The Coffee Shop	That City	ID
2	The Propane Shop	Arlan	TX
3	The Dojo	Tokyo	JP

Record Count: 3, Execution Time: 2ms

Query 3: SELECT * FROM Supplier;

supplier_id	company_name	country	sales_contact_name	email
4	Suppliers Inc.	Canada	Murphy	WeHaveWhatYouWant@email.com
5	I Know A Guy	United States	Precious	NotSuspicious@hotmail.com
6	The Black Market	Everywhere	Anonymous	WeHaveOrdinaryThingsToo@gmail.com

Record Count: 3, Execution Time: 6ms

Query 4: SELECT * FROM Coffee;

coffee_id	shop_id	supplier_id	coffee_name	price_per_pound
7	1	4	Delicious Coffee	2.64
8	2	5	Not Suspicious Coffee	2.53
9	3	6	Illegal Coffee	1.97

Record Count: 3, Execution Time: 1ms

Porter Robin: x | Ed Sings You: x | The Heavy: T: x | My Special S: x | [TRPG] Me: x | Trash - YouTube: x | WGU Student: x | Tips for Getti: x | WGU Perform: x | SQL Fiddle: x | MySQL error: x | Section 2.6: x | +

SQL Fiddle MySQL 5.6 View Sample Fiddle Clear Text to DDL Donate About

```

1 CREATE TABLE Coffee_Shop (
2   shop_id INT PRIMARY KEY,
3   shop_name VARCHAR(50),
4   city VARCHAR(50),
5   state CHAR(2)
6 );
7
8 CREATE TABLE Employee (
9   employee_id INT PRIMARY KEY AUTO_INCREMENT,
10  first_name VARCHAR(10),
11  last_name VARCHAR(30),
12  hire_date DATE,
13  job_title VARCHAR(30),
14  shop_id INT,
15  FOREIGN KEY (shop_id) REFERENCES Coffee_Shop(shop_id)
16 );
17
18 CREATE TABLE Supplier (
19  supplier_id INT PRIMARY KEY,
20  company_name VARCHAR(50),
21  country VARCHAR(30),
22  sales_contact_name VARCHAR(60),
23  email VARCHAR(50) NOT NULL
24 );

```

```

1 SELECT *
2 FROM EMPLOYEE;
3
4 SELECT *
5 FROM COFFEE_SHOP;
6
7 SELECT *
8 FROM SUPPLIER;
9
10 SELECT *
11 FROM COFFEE;

```

Build Schema Edit Fullscreen Browser SQL Run SQL Edit Fullscreen

employee_id	first_name	last_name	hire_date	job_title	shop_id
1	Sandra	Lemon	2004-04-14	general manager	1
2	Bobby	Hill	2014-05-06	god dang it bobby	2
3	Ryu	Hayabusa	1995-06-10	Master Ninja	3

Record Count: 3; Execution Time: 9ms View Execution Plan link

shop_id	shop_name	city	state
1	The Coffee Shop	That City	ID
2	The Propane Shop	Arlen	TX
3	The Dojo	Tokyo	JP

Type here to search 70°F Mostly cloudy 12:23 PM 1/6/2021

CREATE VIEW:

Porter Robin: x | Ed Sings You: x | The Heavy: T: x | My Special Skill: x | [TRPG] Meet: x | Trash - YouTube: x | WGU Student: x | Tips for Getting: x | WGU Performance: x | SQL Fiddle: x | Section 3.1 - C: x | +

SQL Fiddle MySQL 5.6 View Sample Fiddle Clear Text to DDL Donate About

```

41 VALUES (1, 'The Coffee Shop', 'That City', 'ID'),
42 (2, 'The Propane Shop', 'Arlen', 'TX'),
43 (3, 'The Dojo', 'Tokyo', 'JP');
44
45 INSERT INTO EMPLOYEE (first_name, last_name, hire_date, job_title, shop_id)
46 VALUES ('Sandra', 'Lemon', '2004-04-14', 'general manager', 1),
47 ('Bobby', 'Hill', '2014-05-06', 'god dang it bobby', 2),
48 ('Ryu', 'Hayabusa', '1995-06-10', 'Master Ninja', 3);
49
50 INSERT INTO SUPPLIER (supplier_id, company_name, country, sales_contact_name, email)
51 VALUES (4, 'Suppliers Inc.', 'Canada', 'Murphy', 'WeHaveWhatYouWant@gmail.com'),
52 (5, 'I Know A Guy', 'United States', 'Precious', 'NotSuspicious@hotmail.com'),
53 (6, 'The Black Market', 'Everywhere', 'Anonymous', 'WeHaveOrdinaryThingsToo@gmail.com');
54
55 INSERT INTO COFFEE (coffee_id, shop_id, supplier_id, coffee_name, price_per_pound)
56 VALUES (7, 1, 4, 'Delicious Coffee', 2.64),
57 (8, 2, 5, 'Not Suspicious Coffee', 2.53),
58 (9, 3, 6, 'Illegal Coffee', 1.97);
59
60 CREATE VIEW EmployeeView
61 AS SELECT employee_id, CONCAT(first_name, ' ', last_name) AS employee_full_name, hire_date, job_title, shop_id
62 FROM Employee;
63
64

```

```

1
2 SELECT *
3 FROM EmployeeView;

```

Build Schema Edit Fullscreen Browser SQL Run SQL Edit Fullscreen

employee_id	employee_full_name	hire_date	job_title	shop_id
1	Sandra Lemon	2004-04-14	general manager	1
2	Bobby Hill	2014-05-06	god dang it bobby	2
3	Ryu Hayabusa	1995-06-10	Master Ninja	3

Record Count: 3; Execution Time: 27ms View Execution Plan link

Did this query solve the problem? If so, consider donating \$5 to help make sure SQL Fiddle will be here next time you need help with a database problem. Thank!

sqlfiddle.com/

Type here to search 70°F Mostly cloudy 12:34 PM 1/6/2021

CREATING + SHOWING INDEX

The screenshot shows the SQL Fiddle interface with the following SQL code in the left pane:

```
46 VALUES ('Sandra', 'Lemon', '2004-04-14', 'general manager', 1),
47 ('Bobby', 'Hill', '2014-05-06', 'god dang it bobby', 2),
48 ('Ryu', 'Hayabusa', '1995-08-10', 'Master Ninja', 3);
49
50 INSERT INTO SUPPLIER (supplier_id, company_name, country, sales_contact_name, email)
51 VALUES (4, 'Suppliers Inc.', 'Canada', 'Murphy', 'WeHaveWhatYouWant@email.com'),
52 (5, 'I Know A Guy', 'United States', 'Precious', 'NotSuspicious@hotmail.com'),
53 (6, 'The Black Market', 'Everywhere', 'Anonymous', 'WeHaveOrdinaryThingsToo@gmail.com');
54
55 INSERT INTO Coffee (coffee_id, shop_id, supplier_id, coffee_name, price_per_pound)
56 VALUES (7, 1, 4, 'Delicious Coffee', 2.64),
57 (8, 2, 5, 'Not Suspicious Coffee', 2.53),
58 (9, 3, 6, 'Illegal Coffee', 1.97);
59
60 CREATE VIEW EmployeeView
61 AS SELECT employee_id, CONCAT(first_name, ' ', last_name) AS employee_full_name, hire_date, job_title, shop_id
62 FROM Employee;
63
64 CREATE INDEX idx_coffee
65 ON Coffee (coffee_name);
66
67
68
69
```

The right pane contains the query: `1 SHOW INDEX FROM Coffee;`

Below the code panes is a table showing the index details:

Table	Non_unique	Key_name	Seq_in_index	Column_name	Collation	Cardinality	Sub_part	Packed	Null	Index_type	Comment	Index_comment
coffee	0	PRIMARY	1	coffee_id	A	3	(null)	(null)		BTREE		
coffee	1	shop_id	1	shop_id	A	3	(null)	(null)	YES	BTREE		
coffee	1	supplier_id	1	supplier_id	A	3	(null)	(null)	YES	BTREE		
coffee	1	idx_coffee	1	coffee_name	A	3	(null)	(null)	YES	BTREE		

Record Count: 4. Execution Time: 1ms. [link](#)

Did this query solve the problem? If so, consider donating \$5 to help make sure SQL Fiddle will be here next time you need help with a database problem. Thank!

SFW Queries:

The screenshot shows the SQL Fiddle interface with the following SQL code in the left pane:

```
46 VALUES ('Sandra', 'Lemon', '2004-04-14', 'general manager', 1),
47 ('Bobby', 'Hill', '2014-05-06', 'god dang it bobby', 2),
48 ('Ryu', 'Hayabusa', '1995-08-10', 'Master Ninja', 3);
49
50 INSERT INTO SUPPLIER (supplier_id, company_name, country, sales_contact_name, email)
51 VALUES (4, 'Suppliers Inc.', 'Canada', 'Murphy', 'WeHaveWhatYouWant@email.com'),
52 (5, 'I Know A Guy', 'United States', 'Precious', 'NotSuspicious@hotmail.com'),
53 (6, 'The Black Market', 'Everywhere', 'Anonymous', 'WeHaveOrdinaryThingsToo@gmail.com');
54
55 INSERT INTO Coffee (coffee_id, shop_id, supplier_id, coffee_name, price_per_pound)
56 VALUES (7, 1, 4, 'Delicious Coffee', 2.64),
57 (8, 2, 5, 'Not Suspicious Coffee', 2.53),
58 (9, 3, 6, 'Illegal Coffee', 1.97);
59
60 CREATE VIEW EmployeeView
61 AS SELECT employee_id, CONCAT(first_name, ' ', last_name) AS employee_full_name, hire_date, job_title, shop_id
62 FROM Employee;
63
64 CREATE INDEX idx_coffee
65 ON Coffee (coffee_name);
66
67
68
69
```

The right pane contains the query: `1 SELECT first_name, last_name FROM Employee`

Below the code panes is a table showing the results of the query:

first_name	last_name
Bobby	Hill
Ryu	Hayabusa

Record Count: 2. Execution Time: 1ms. [View Execution Plan](#) [link](#)

The right pane contains the query: `1 SELECT sales_contact_name FROM SUPPLIER WHERE email = 'NotSuspicious@hotmail.com';`

Below the code panes is a table showing the results of the query:

sales_contact_name
Precious

Record Count: 1. Execution Time: 2ms. [View Execution Plan](#) [link](#)

Did this query solve the problem? If so, consider donating \$5 to help make sure SQL Fiddle will be here next time you need help with a database problem. Thank!

Complex Query:

SQL Fiddle MySQL 5.6

```
11 last_name VARCHAR(30),
12 hire_date DATE,
13 job_title VARCHAR(30),
14 shop_id INT,
15 FOREIGN KEY (shop_id) REFERENCES Coffee_Shop(shop_id)
16 );
17
18 CREATE TABLE Supplier (
19   supplier_id INT PRIMARY KEY,
20   company_name VARCHAR(50),
21   country VARCHAR(30),
22   sales_contact_name VARCHAR(60),
23   email VARCHAR(50) NOT NULL
24 );
25
26 CREATE TABLE Coffee (
27   coffee_id INT PRIMARY KEY,
28   shop_id INT,
29   supplier_id INT,
30   coffee_name VARCHAR(30),
31   price_per_pound NUMERIC(5,2),
32   FOREIGN KEY (shop_id) REFERENCES Coffee_Shop(shop_id)
33   ON UPDATE CASCADE,
34   ON DELETE CASCADE,
```

```
1 SELECT shop_name, CONCAT(first_name, ' ', last_name) AS Employee, coffee_name
2 FROM Coffee_Shop AS C
3 INNER JOIN Employee AS E ON E.shop_id = C.shop_id
4 INNER JOIN Coffee AS Cof ON Cof.shop_id = C.shop_id;
```

Build Schema | Edit Fiddle | Run SQL | Edit Fiddle

shop_name	Employee	coffee_name
The Coffee Shop	Sandra Lemon	Delicious Coffee
The Propane Shop	Bobby Hill	Not Suspicious Coffee
The Dojo	Ryu Hayabusa	Illegal Coffee

Record Count: 3, Execution Time: 6ms | View Execution Plan | Link

Did this query solve the problem? If so, consider donating \$5 to help make sure SQL Fiddle will be here next time you need help with a database problem. Thanks!

Type here to search

71°F Mostly cloudy 12:51 PM 1/6/2022