

// Part 1

```
mysql> CREATE DATABASE jaunty_coffee_erd;
Query OK, 1 row affected (0.00 sec)

mysql> USE jaunty_coffee_erd;
Database changed
mysql> CREATE TABLE supplier (
  -> supplier_id INT NOT NULL,
  -> company_name VARCHAR(50),
  -> country VARCHAR(30),
  -> sales_contact_name VARCHAR(60),
  -> email VARCHAR(50),
  -> PRIMARY KEY (supplier_id)
  -> );
Query OK, 0 rows affected (0.06 sec)

mysql> CREATE TABLE coffee_shop (
  -> shop_id INT NOT NULL,
  -> shop_name VARCHAR(50),
  -> city VARCHAR(50),
  -> state CHAR(2),
  -> PRIMARY KEY (shop_id)
  -> );
Query OK, 0 rows affected (0.07 sec)

mysql> CREATE TABLE employee (
  -> employee_id INT NOT NULL,
  -> 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)
  -> );
Query OK, 0 rows affected (0.11 sec)

mysql> CREATE TABLE coffee (
  -> coffee_id INT NOT NULL,
  -> 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)
  -> );
Query OK, 0 rows affected (0.13 sec)

mysql> SHOW TABLES;
+-----+
| Tables_in_jaunty_coffee_erd |
+-----+
| coffee                       |
| coffee_shop                  |
| employee                     |
| employee_name                |
| supplier                     |
+-----+
5 rows in set (0.00 sec)
```

// Part 2

```
mysql> INSERT INTO supplier (supplier_id, company_name, country, sales_contact_name, email)
  -> VALUES
  -> (150, "Davids Coffee Hut", "United States", "David", "david@thecoffeehut.com"),
  -> (323, "Coffee Barz", "Mexico", "Micheal", "supplier@coffeebarz.com"),
  -> (228, "Roasted and Toasted", "Canada", "Victoria", "victoria.williams@randt.com");
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql> INSERT INTO coffee_shop (shop_id, shop_name, city, state)
  -> VALUES
  -> (987, "Java the Hutt", "Austin", "TX"),
  -> (111, "The Coffee Spot", "Boston", "MA"),
  -> (154, "Koffee World", "Buffalo", "NY");
Query OK, 3 rows affected (0.04 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql> INSERT INTO employee (employee_id, first_name, last_name, hire_date, job_title, shop_id)
  -> VALUES
  -> (91812, "Peter", "Parker", '2019-12-02', "Manager", 987),
  -> (33215, "Susan", "Storm", '2020-04-21', "Barista", 111),
  -> (99323, "Steven", "Rogers", '2020-11-10', "Shift Lead", 154);
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql> INSERT INTO coffee (coffee_id, shop_id, supplier_id, coffee_name, price_per_pound)
  -> VALUES
  -> (123, 987, 150, "Medium Roast", 21.33),
  -> (765, 111, 323, "Decaf", 15.99),
  -> (882, 154, 228, "Pecan Roast", 13.99);
Query OK, 3 rows affected (0.08 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql> DESCRIBE supplier;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| supplier_id | int(11) | NO | PRI | NULL | |
| company_name | varchar(50) | YES | | NULL | |
| country | varchar(30) | YES | | NULL | |
| sales_contact_name | varchar(60) | YES | | NULL | |
| email | varchar(50) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> DESCRIBE coffee_shop;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| shop_id | int(11) | NO | PRI | NULL | |
| shop_name | varchar(50) | YES | | NULL | |
| city | varchar(50) | YES | | NULL | |
| state | char(2) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> DESCRIBE employee;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| employee_id | int(11) | NO | PRI | NULL | |
| first_name | varchar(30) | YES | | NULL | |
| last_name | varchar(30) | YES | | NULL | |
| hire_date | date | YES | | NULL | |
| job_title | varchar(30) | YES | | NULL | |
| shop_id | int(11) | YES | MUL | NULL | |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.01 sec)

mysql> DESCRIBE coffee;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| coffee_id | int(11) | NO | PRI | NULL | |
| shop_id | int(11) | YES | MUL | NULL | |
| supplier_id | int(11) | YES | MUL | NULL | |
| coffee_name | varchar(30) | YES | MUL | NULL | |
| price_per_pound | decimal(5,2) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

// Part 3

```
mysql> CREATE VIEW employee_name AS SELECT *, CONCAT(first_name, " ", last_name) AS employee_full_name FROM employee;
Query OK, 0 rows affected (0.04 sec)

mysql> SELECT * FROM employee_name;
+-----+-----+-----+-----+-----+-----+-----+
| employee_id | first_name | last_name | hire_date | job_title | shop_id | employee_full_name |
+-----+-----+-----+-----+-----+-----+-----+
| 33215 | Susan | Storm | 2020-04-21 | Barista | 111 | Susan Storm |
| 91812 | Peter | Parker | 2019-12-02 | Manager | 987 | Peter Parker |
| 99323 | Steven | Rogers | 2020-11-10 | Shift Lead | 154 | Steven Rogers |
+-----+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

// Part 4

```
mysql> CREATE INDEX coffee_name ON coffee (coffee_name);
Query OK, 0 rows affected (0.18 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> SHOW INDEX FROM coffee;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 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 | YES | 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 | coffee_name | 1 | coffee_name | A | 3 | NULL | NULL | YES | BTREE | | |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

// Part 5

```
mysql> SELECT city FROM coffee_shop WHERE state="TX" OR shop_name="Koffee World";
+-----+
| city |
+-----+
| Buffalo |
| Austin |
+-----+
2 rows in set (0.00 sec)
```

// Part 6

```
mysql> SELECT coffee_shop.shop_name, employee.first_name, coffee.coffee_name
  -> FROM coffee_shop
  -> INNER JOIN employee
  -> ON coffee_shop.shop_id=employee.shop_id
  -> INNER JOIN coffee
  -> ON coffee_shop.shop_id=coffee.shop_id;
+-----+-----+-----+
| shop_name | first_name | coffee_name |
+-----+-----+-----+
| Java the Hutt | Peter | Medium Roast |
| The Coffee Spot | Susan | Decaf |
| Koffee World | Steven | Pecan Roast |
+-----+-----+-----+
3 rows in set (0.00 sec)
```