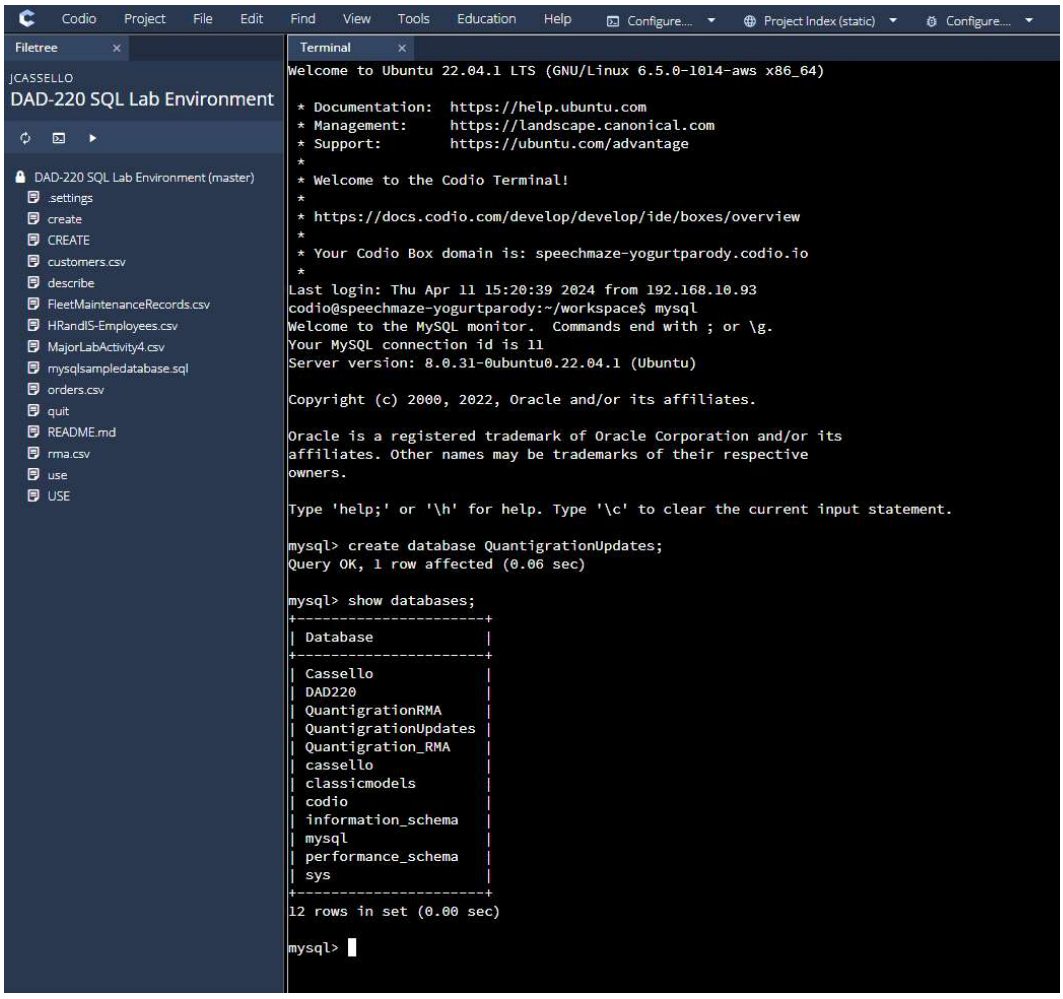
DAD 220 Project One Template

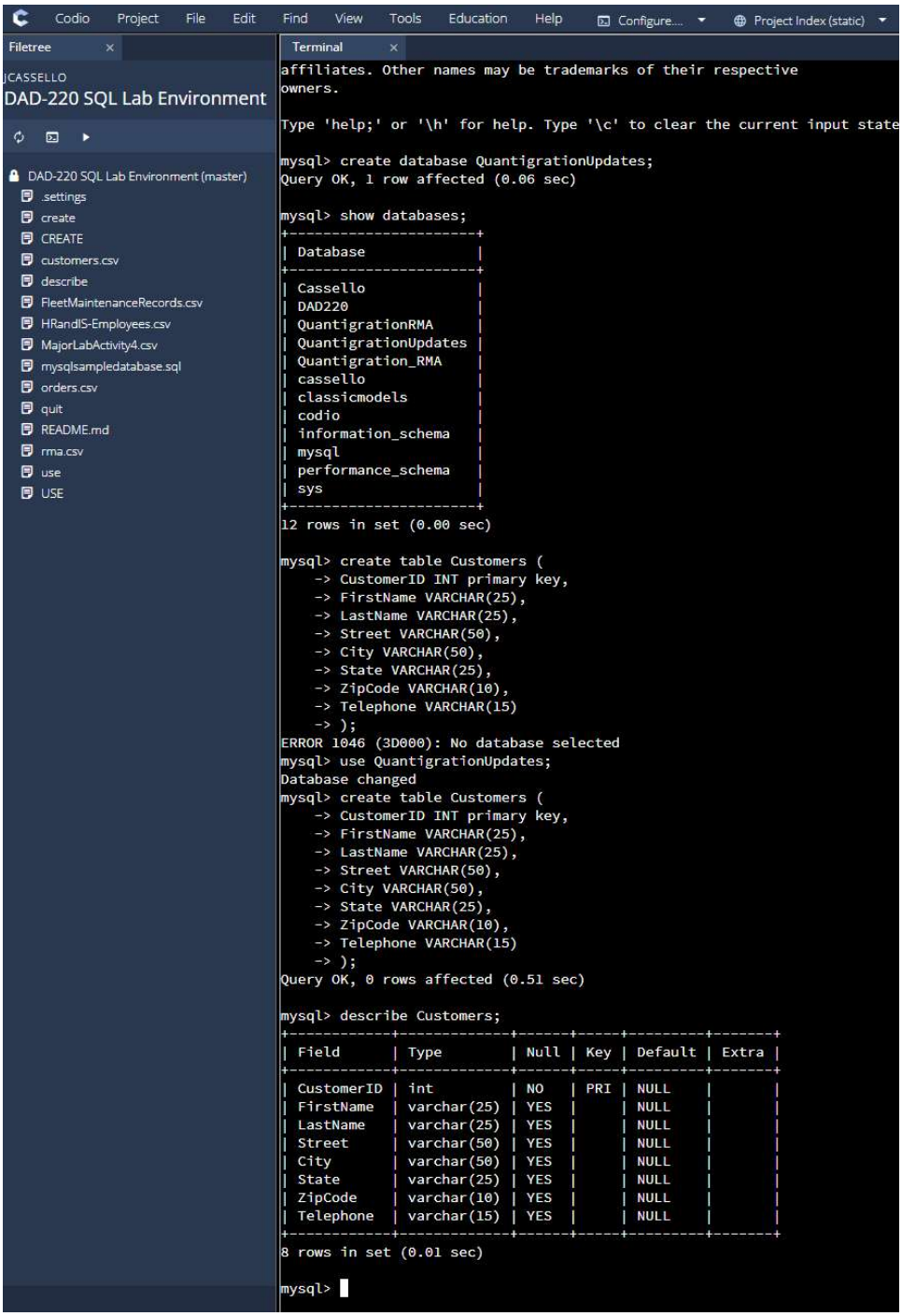
Complete these steps as you work through the directions for Project One. Replace the bracketed text with your screenshots and brief explanations of the work they capture. Each screenshot and its explanation should be sized to approximately one-quarter of the page with the description written below the screenshot. Follow these rules for each of the prompts and questions below. Review the example document in the Supporting Materials section of the Project One Guidelines and Rubric for assistance.

Step One: Create a Database

- In your online IDE (Codio), **create a database schema** called QuantigrationUpdates that will hold tables by using SQL commands.
    - List out the database name on the screen.
    - Provide the SQL commands you ran against MySQL to complete this step.



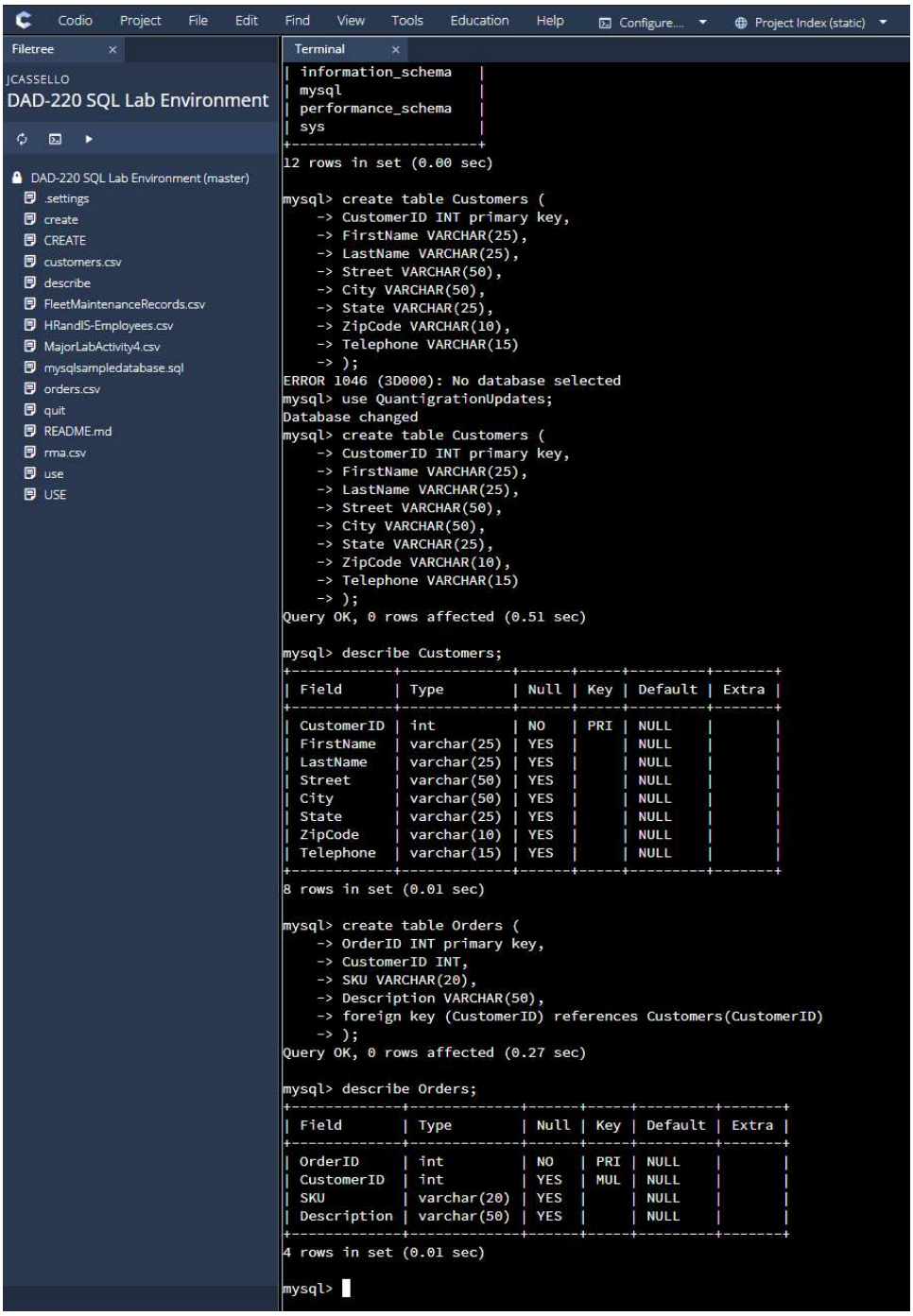
- Connect to the QuantigrationUpdates schema. Using the ERD as a reference, **write SQL commands to create** the following **tables** with the appropriate attributes and keys to demonstrate relationships based on the ERD.
    - A table named Customers to store customer information with a primary key of Customer ID. Provide the SQL commands you ran against MySQL to complete this step.



mysql> create table Customers (
-> CustomerID INT primary key,
-> FirstName VARCHAR(25),
-> LastName VARCHAR(25),
-> Street VARCHAR(50),
-> City VARCHAR(50),
-> State VARCHAR(25),

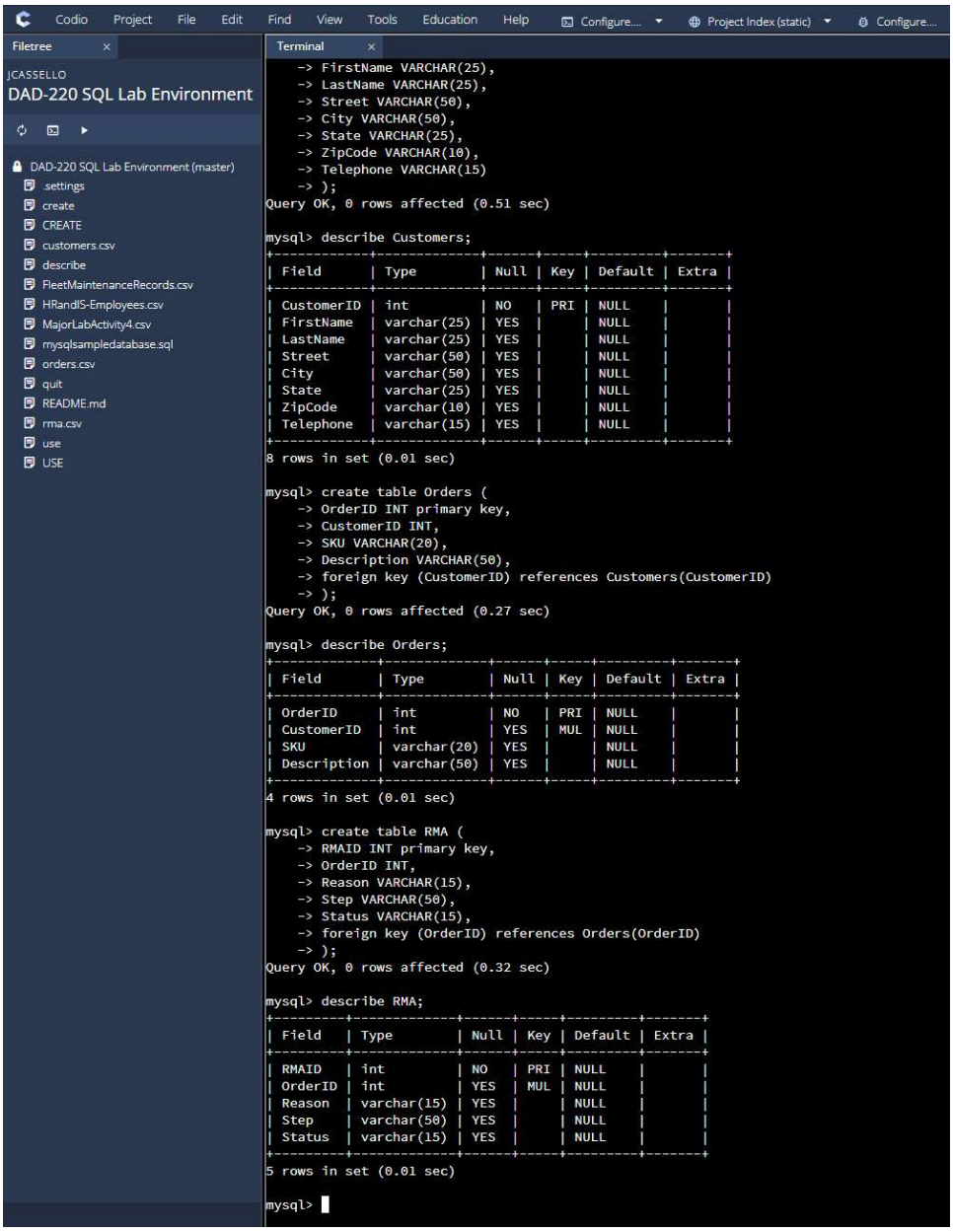
```
    -> ZipCode VARCHAR(10),
    -> Telephone VARCHAR(15)
    -> );
```

- A table named Orders to store order information with a primary key of Order ID and a foreign key of Customer ID. Provide the SQL commands you ran against MySQL to complete this step.



mysql> create table Orders (
-> OrderID INT primary key,
-> CustomerID INT,
-> SKU VARCHAR(20),
-> Description VARCHAR(50),
-> foreign key (CustomerID) references Customers(CustomerID)
->);

- A table named RMA to store RMA information with a primary key of RMA ID and a foreign key of Order ID. Provide the SQL commands you ran against MySQL to complete this step.

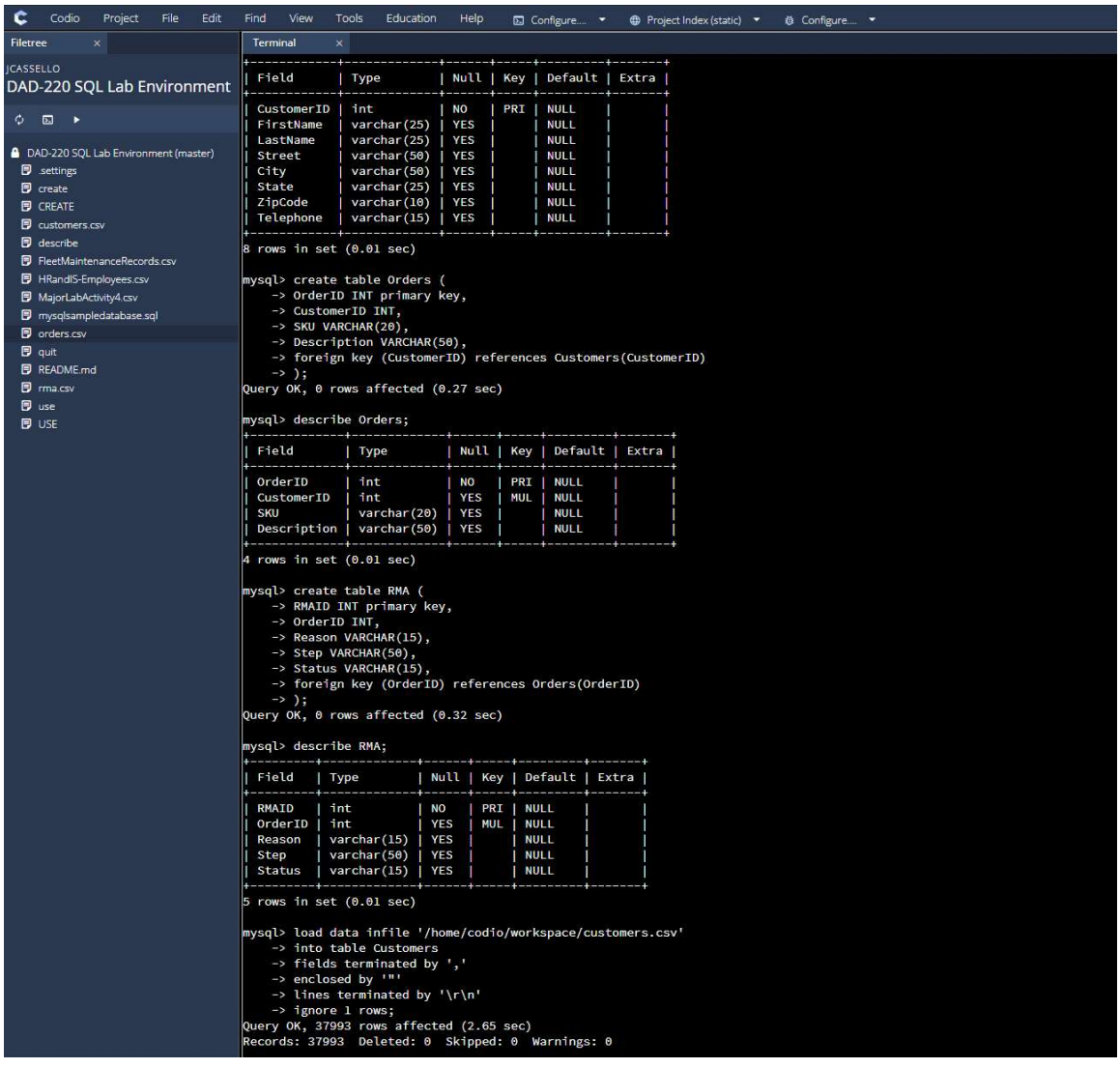


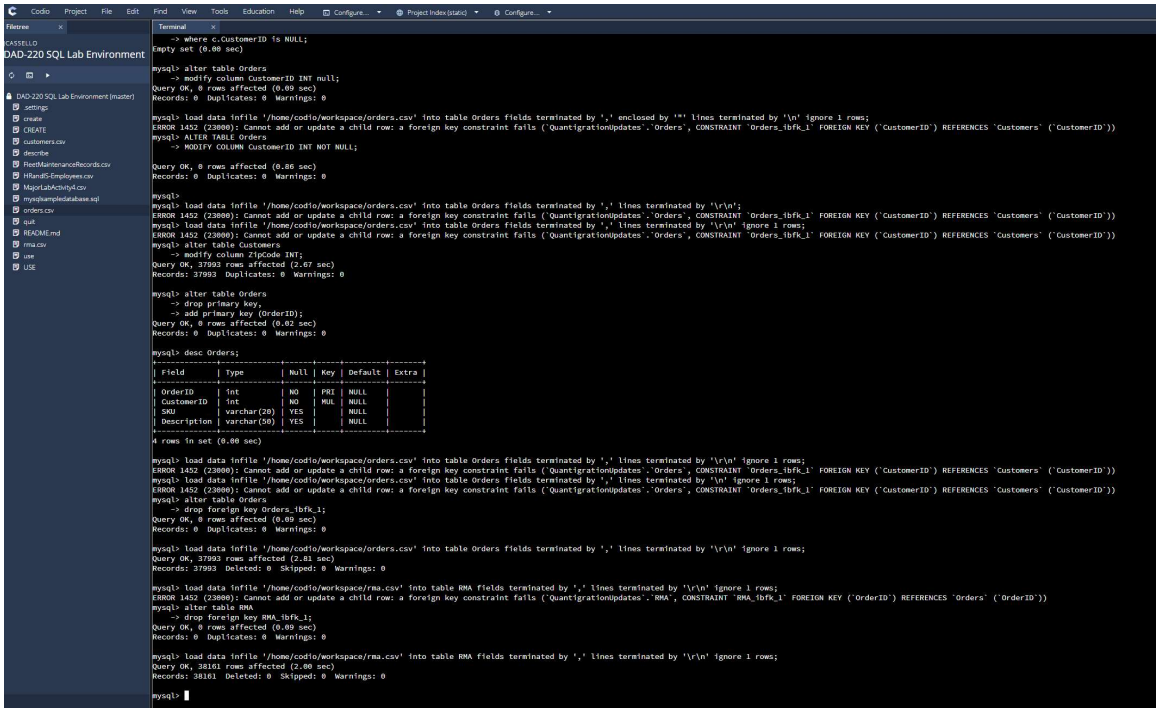
mysql> create table RMA (
-> RMAID INT primary key,
-> OrderID INT,
-> Reason VARCHAR(15),
-> Step VARCHAR(50),
-> Status VARCHAR(15),

-> foreign key (OrderID) references Orders(OrderID)
->);

Step Two: Load and Query the Data

- **Import** the **data** from each file **into tables.**
    - Use the QuantigrationUpdates database, the three tables you created, and the three CSV files preloaded into Codio.
    - Use the import utility of your database program to load the data from each file into the table of the same name. Perform this step three times, once for each table.
    - Provide the SQL commands you ran against MySQL to complete this step.





mysql> load data infile '/home/codio/workspace/customers.csv'
-> into table Customers
-> fields terminated by ','
-> enclosed by '"'
-> lines terminated by '\r\n'
-> ignore 1 rows;
Query OK, 37993 rows affected (2.65 sec)
Records: 37993 Deleted: 0 Skipped: 0 Warnings: 0

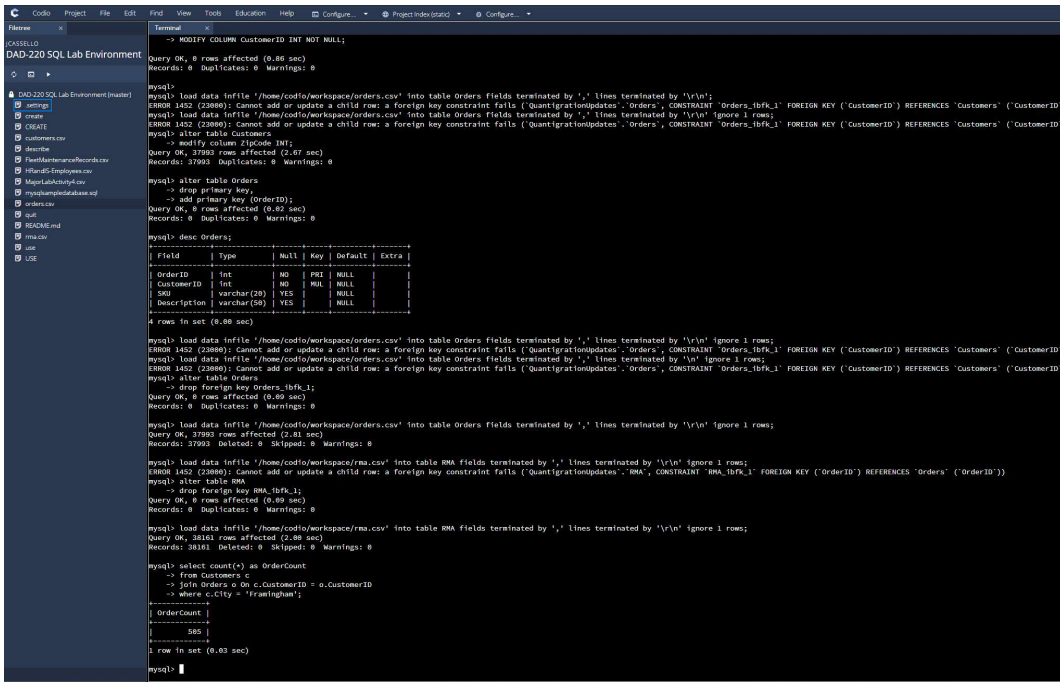
mysql> load data infile '/home/codio/workspace/orders.csv' into table Orders fields terminated by ',' lines terminated by '\r\n' ignore 1 rows;
Query OK, 37993 rows affected (2.81 sec)
Records: 37993 Deleted: 0 Skipped: 0 Warnings: 0

mysql> load data infile '/home/codio/workspace/rma.csv' into table RMA fields terminated by ',' lines terminated by '\r\n' ignore 1 rows;
Query OK, 38161 rows affected (2.00 sec)
Records: 38161 Deleted: 0 Skipped: 0 Warnings: 0

- **Write basic queries** against the imported tables to organize and analyze the targeted data**.** For each query, replace the bracketed text with a screenshot of the query and its output. Also, include a one- to three-sentence description of the output.
    - Write a SQL query that returns the count of orders for customers located only in Framingham, Massachusetts.
        - This query will use a table join between the Customers and Orders tables. The query will also use a WHERE clause.

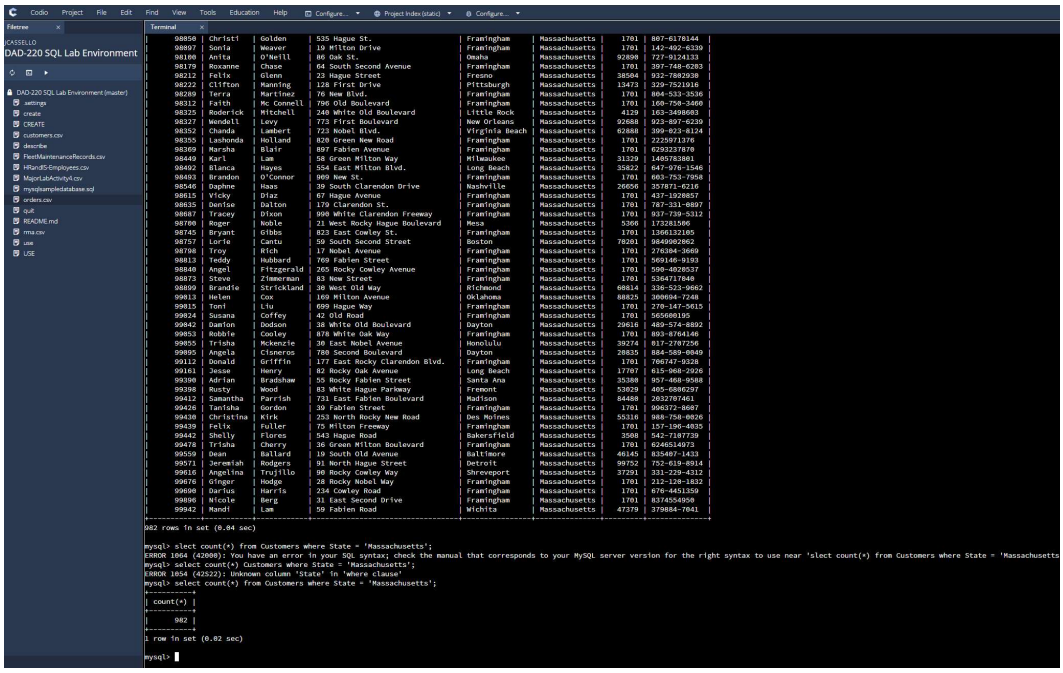
- How many records were returned?

505 records were returned for customers located only in Framingham, Massachusetts.



- Write a SQL query to select all of the customers located in Massachusetts.
  - Use a WHERE clause to limit the number of records in the Customers table to only those who are located in Massachusetts.
  - How many records were returned?

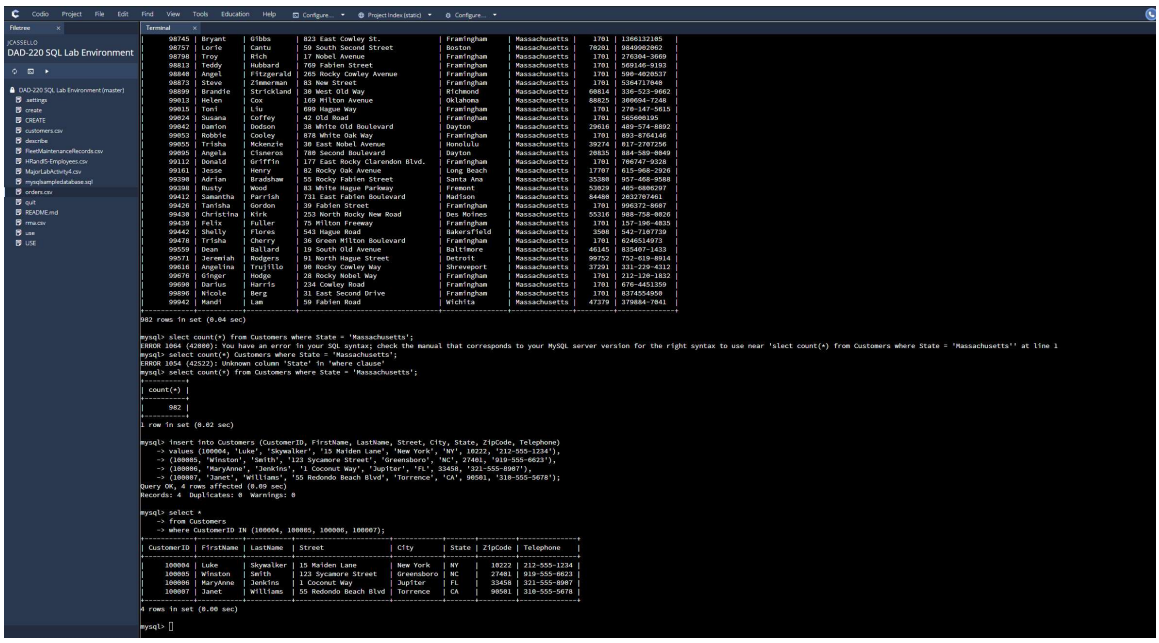
982 records were returned for customers who are located in Massachusetts.



- Write a SQL query to insert four new records into the Orders and Customers tables using the data below:

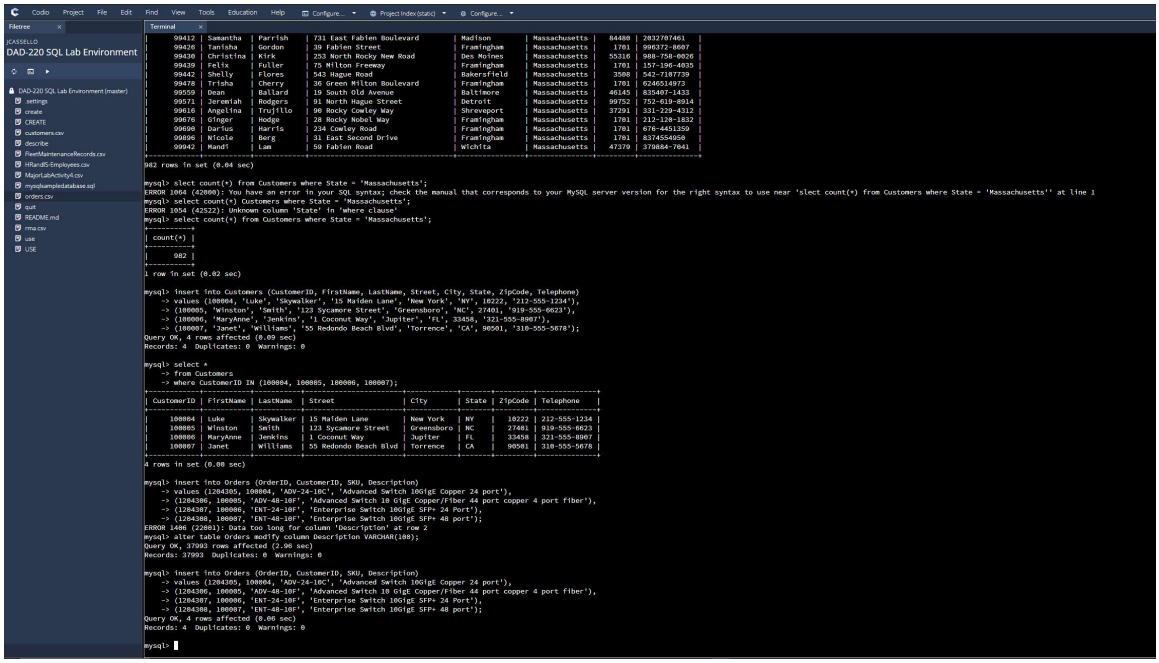
Customers Table

CustomerID	FirstName	LastName	StreetAddress	City	State	ZipCode	Telephone
100004	Luke	Skywalker	15 Maiden Lane	New York	NY	10222	212-555-1234
100005	Winston	Smith	123 Sycamore Street	Greensboro	NC	27401	919-555-6623
100006	MaryAnne	Jenkins	1 Coconut Way	Jupiter	FL	33458	321-555-8907
100007	Janet	Williams	55 Redondo Beach Blvd	Torrence	CA	90501	310-555-5678



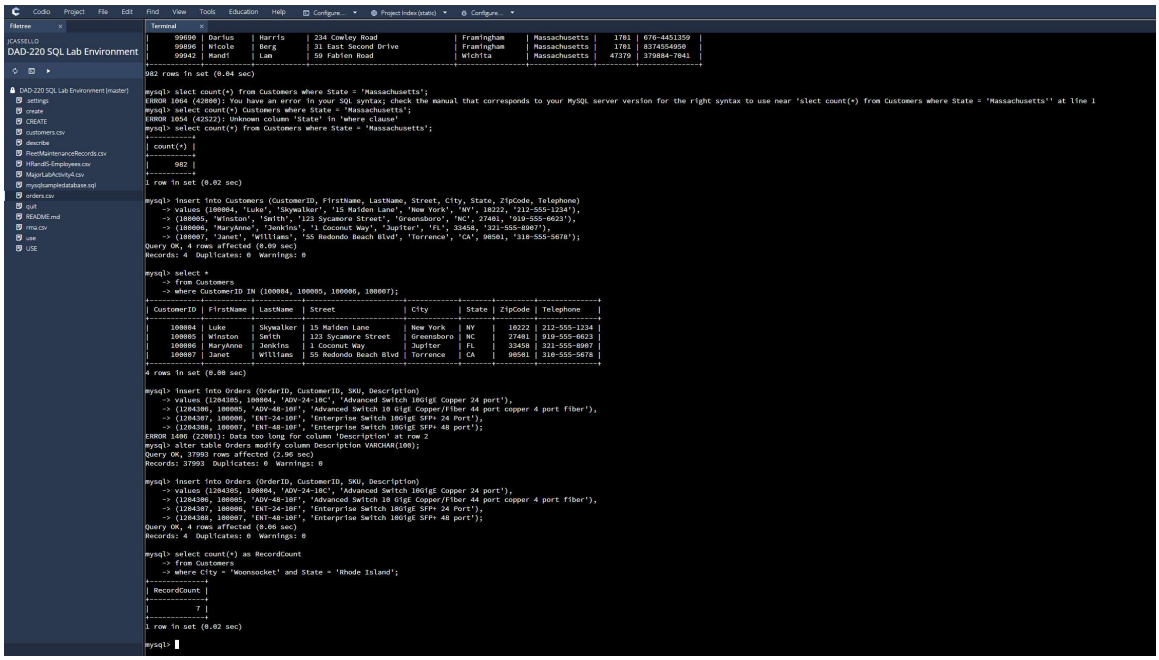
Orders Table

OrderID	CustomerID	SKU	Description
1204305	100004	ADV-24-10C	Advanced Switch 10GigE Copper 24 port
1204306	100005	ADV-48-10F	Advanced Switch 10 GigE Copper/Fiber 44 port copper 4 port fiber
1204307	100006	ENT-24-10F	Enterprise Switch 10GigE SFP+ 24 Port
1204308	100007	ENT-48-10F	Enterprise Switch 10GigE SFP+ 48 port



- In the Customers table, perform a query to count all records where the city is Woonsocket and the state is Rhode Island.
    - How many records are in the Customers table where the field "city" equals "Woonsocket"?

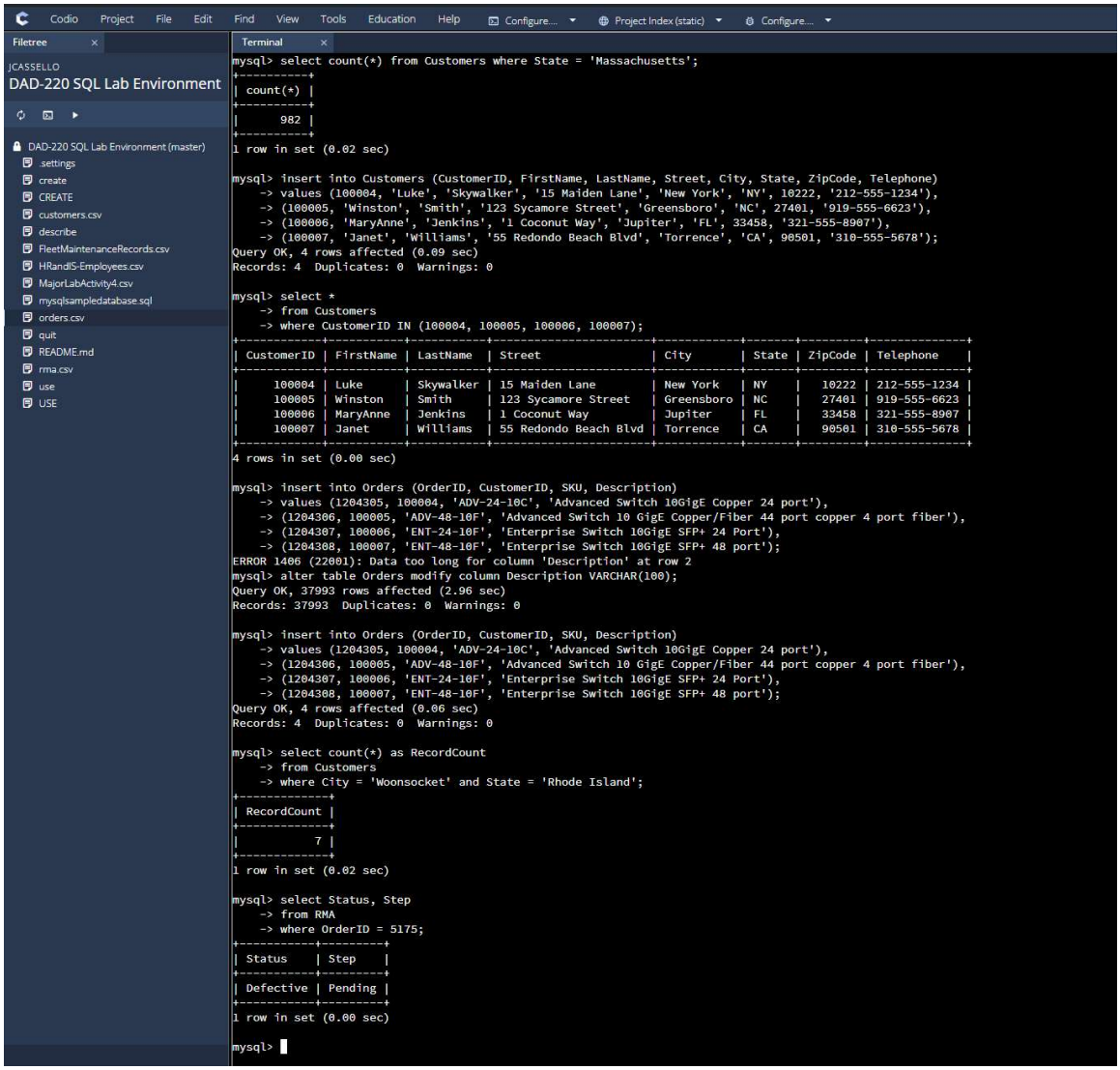
7 records were returned when the city is Woonsocket and the state is Rhode Island




```
|      99090 | Darius    | Harris    | 234 Cowley Road                | Framingham     | Massachusetts |    1701 | 676-4451359  |
|      99896 | Nicole    | Berg      | 31 East Second Drive           | Framingham     | Massachusetts |    1701 | 8374554950   |
|      99942 | Mandi     | Lan       | 59 Fabien Road                 | Wichita        | Massachusetts |   47379 | 379884-7841  |
+------------+-----------+-----------+--------------------------------+----------------+---------------+---------+--------------+
982 rows in set (0.04 sec)

mysql> slect count(*) from Customers where State = 'Massachusetts';
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'slect count(*) from Customers where State = 'Massachusetts'' at line 1
mysql> select count(*) Customers where State = 'Massachusetts';
ERROR 1054 (42S22): Unknown column 'State' in 'where clause'
mysql> select count(*) from Customers where State = 'Massachusetts';
+----------+
| count(*) |
+----------+
|      982 |
+----------+
1 row in set (0.02 sec)

mysql> insert into Customers (CustomerID, FirstName, LastName, Street, City, State, ZipCode, Telephone)
    -> values (100004, 'Luke', 'Skywalker', '15 Maiden Lane', 'New York', 'NY', 10222, '212-555-1234'),
    -> (100005, 'Winston', 'Smith', '123 Sycamore Street', 'Greensboro', 'NC', 27401, '910-555-6623'),
    -> (100006, 'MaryAnne', 'Jenkins', '1 Coconut Way', 'Jupiter', 'FL', 33458, '321-555-8987'),
    -> (100007, 'Janet', 'Williams', '55 Redondo Beach Blvd', 'Torrence', 'CA', 90501, '310-555-5678');
Query OK, 4 rows affected (0.09 sec)
Records: 4  Duplicates: 0  Warnings: 0

mysql> select *
    -> from Customers
    -> where CustomerID IN (100004, 100005, 100006, 100007);
+------------+-----------+-----------+--------------------+-------------+-------+---------+--------------+
| CustomerID | FirstName | LastName  | Street             | City        | State | ZipCode | Telephone    |
+------------+-----------+-----------+--------------------+-------------+-------+---------+--------------+
|     100004 | Luke      | Skywalker | 15 Maiden Lane     | New York    | NY    |   10222 | 212-555-1234 |
|     100005 | Winston   | Smith     | 123 Sycamore Street| Greensboro  | NC    |   27401 | 910-555-6623 |
|     100006 | MaryAnne  | Jenkins   | 1 Coconut Way      | Jupiter     | FL    |   33458 | 321-555-8987 |
|     100007 | Janet     | Williams  | 55 Redondo Beach Blvd | Torrence | CA    |   90501 | 310-555-5678 |
+------------+-----------+-----------+--------------------+-------------+-------+---------+--------------+
4 rows in set (0.00 sec)

mysql> insert into Orders (OrderID, CustomerID, SKU, Description)
    -> values (1204385, 100004, 'ADV-24-10C', 'Advanced Switch 10GigE Copper 24 port'),
    -> (1204386, 100005, 'ADV-48-10F', 'Advanced Switch 10 GigE Copper/Fiber 44 port copper 4 port fiber'),
    -> (1204387, 100006, 'ENT-24-10F', 'Enterprise Switch 10GigE SFP+ 24 Port'),
    -> (1204388, 100007, 'ENT-48-10F', 'Enterprise Switch 10GigE SFP+ 48 port');
ERROR 1406 (22001): Data too long for column 'Description' at row 2
mysql> alter table Orders modify column Description VARCHAR(100);
Query OK, 37993 rows affected (2.96 sec)
Records: 37993  Duplicates: 0  Warnings: 0

mysql> insert into Orders (OrderID, CustomerID, SKU, Description)
    -> values (1204385, 100004, 'ADV-24-10C', 'Advanced Switch 10GigE Copper 24 port'),
    -> (1204386, 100005, 'ADV-48-10F', 'Advanced Switch 10 GigE Copper/Fiber 44 port copper 4 port fiber'),
    -> (1204387, 100006, 'ENT-24-10F', 'Enterprise Switch 10GigE SFP+ 24 Port'),
    -> (1204388, 100007, 'ENT-48-10F', 'Enterprise Switch 10GigE SFP+ 48 port');
Query OK, 4 rows affected (0.06 sec)
Records: 4  Duplicates: 0  Warnings: 0

mysql> select count(*) as RecordCount
    -> from Customers
    -> where City = 'Woonsocket' and State = 'Rhode Island';
+-------------+
| RecordCount |
+-------------+
|           7 |
+-------------+
1 row in set (0.02 sec)

mysql>
```

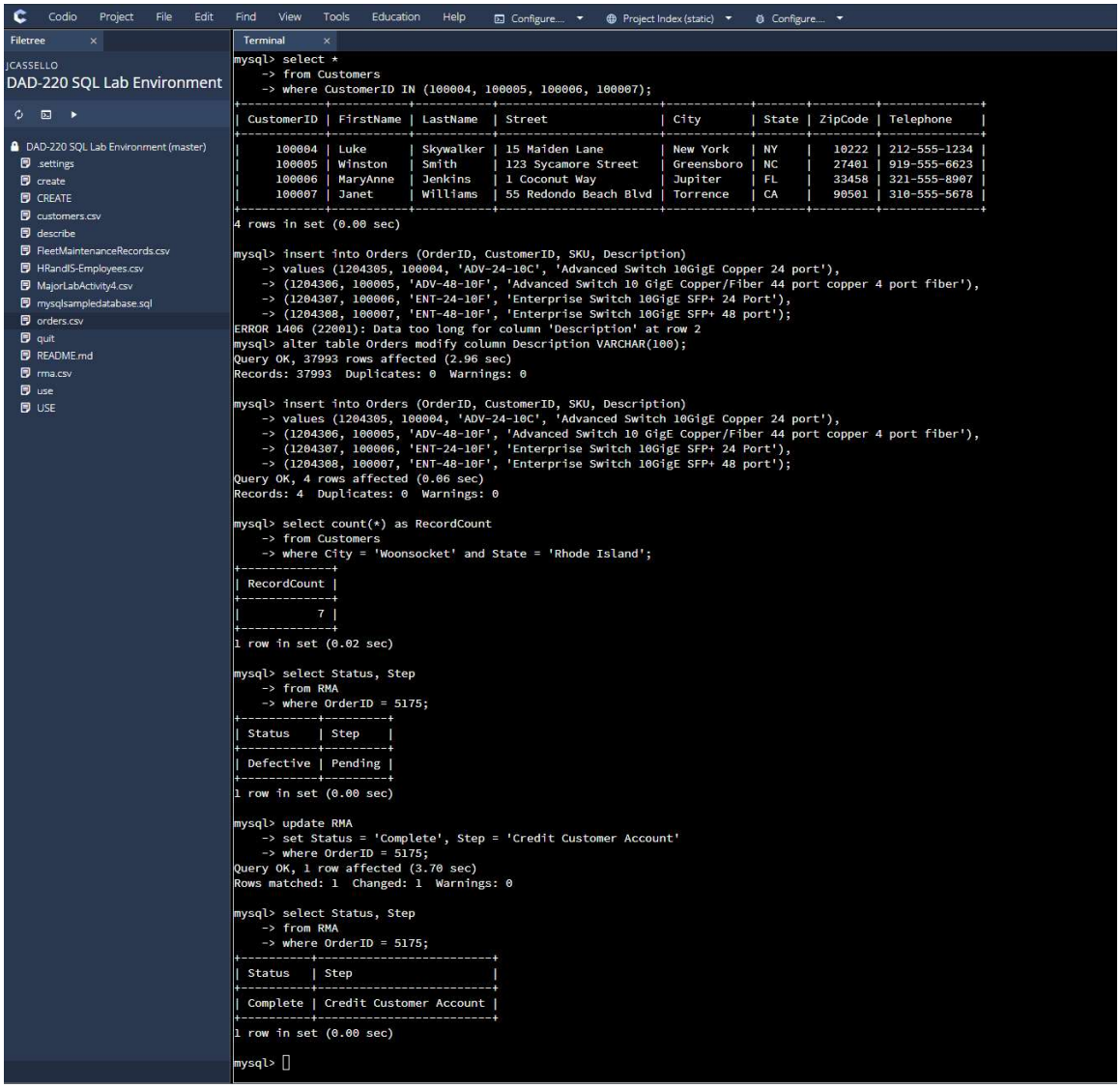
- In the RMA database, update a customer's records.
    - Write a SQL statement to select the current fields of status and step for the record in the RMA table with an OrderID value of "5175".
        - What are the current status and step?

Status = Defective
Step = Pending



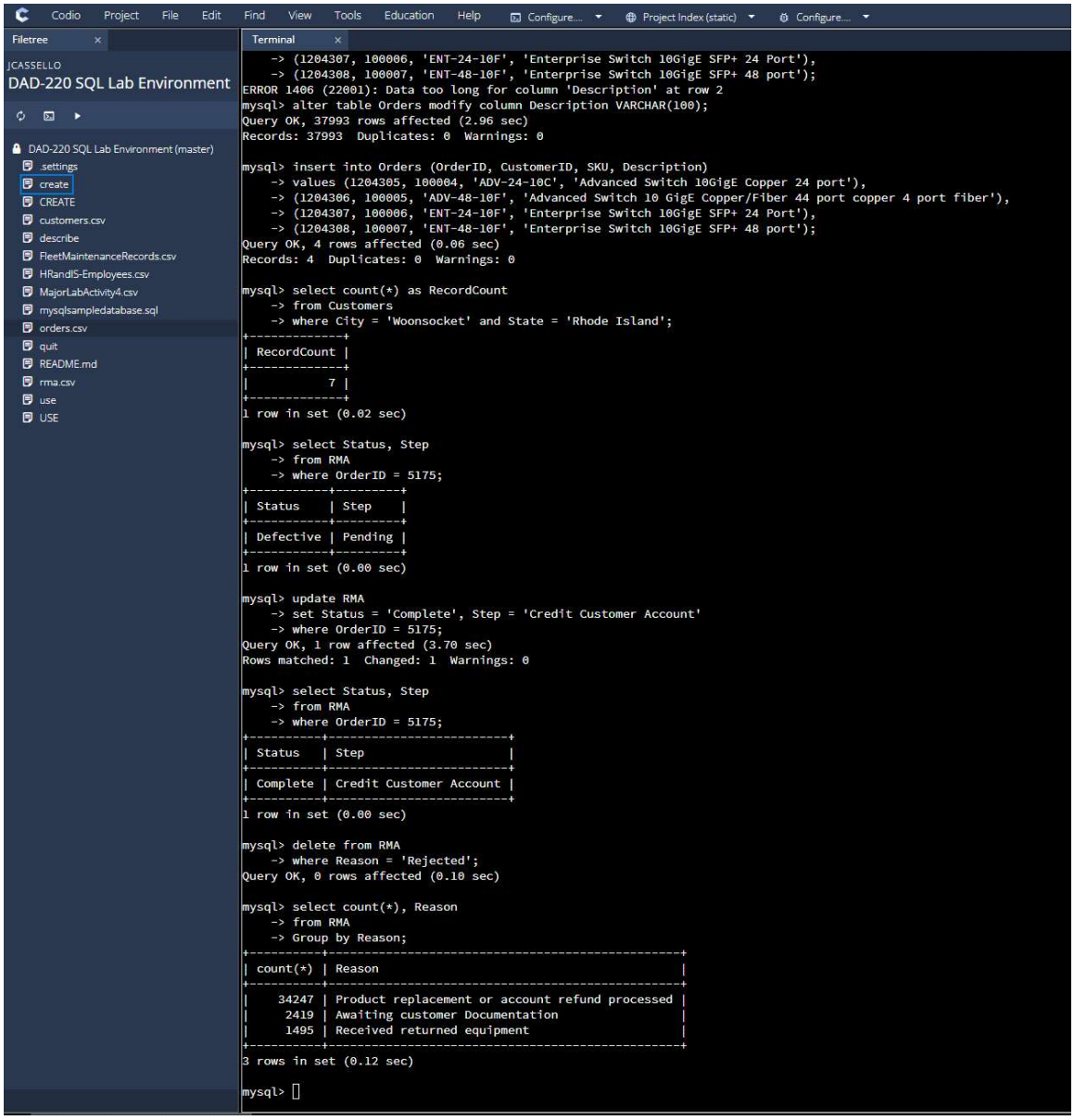
- Write a SQL statement to update the **status** and **step** for the **OrderID**, 5175 to **status** = "Complete" and **step** = "Credit Customer Account".
    - What are the updated **status** and **step** values for this record?

Status = Complete
Step = Credit Customer Account

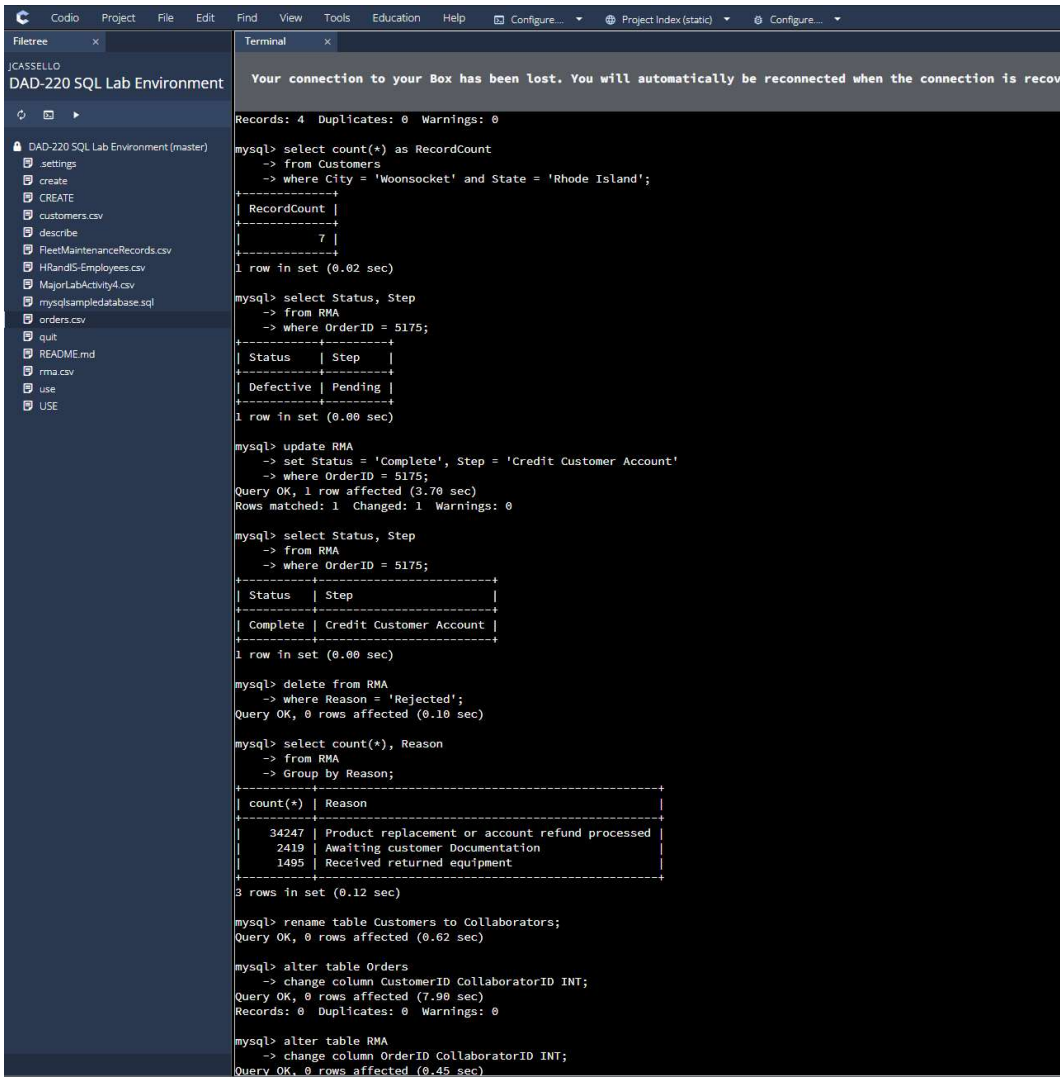


- Delete RMA records.
    - Write a SQL statement to delete all records with a reason of "Rejected".
        - How many records were deleted?

0 records were returned which means there are no records with that reason.



- **Update your existing tables** from "Customer" to "Collaborator" using SQL based on this change in requirements. Copy and paste the SQL you write to do the following action:
    - Rename all instances of "Customer" to "Collaborator".

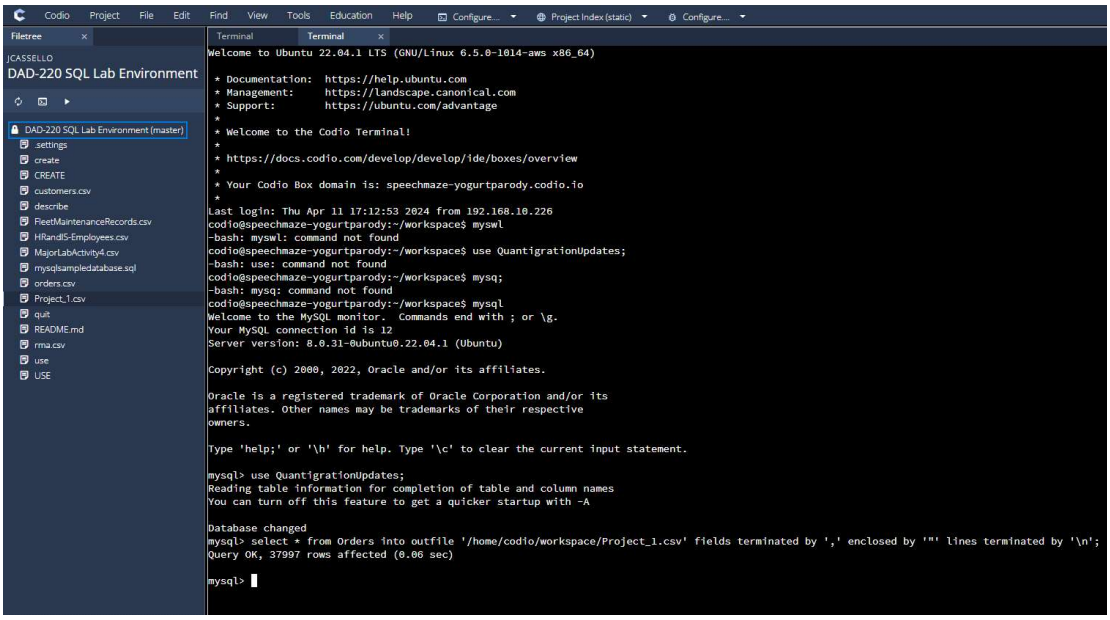


mysql> rename table Customers to Collaborators;
Query OK, 0 rows affected (0.62 sec)

mysql> alter table Orders
-> change column CustomerID CollaboratorID INT;
Query OK, 0 rows affected (7.90 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> alter table RMA
-> change column OrderID CollaboratorID INT;
Query OK, 0 rows affected (0.45 sec)
Records: 0 Duplicates: 0 Warnings: 0

- **Create** an **output file** of the required query results. Write a SQL statement to list the contents of the **Orders** table and send the output to a file that has a CSV extension.


Codio
Project
File
Edit
Find
View
Tools
Education
Help
Configure...
Project Index (static)
Configure...
Filetree
JCASSELLO
DAD-220 SQL Lab Environment
DAD-220 SQL Lab Environment (master)
.settings
create
CREATE
customers.csv
describe
FleetMaintenanceRecords.csv
HRandIS-Employees.csv
MajorLabActivity4.csv
mysqlsampledatabase.sql
orders.csv
Project_1.csv
quit
README.md
rma.csv
use
USE
Terminal
Terminal
Welcome to Ubuntu 22.04.1 LTS (GNU/Linux 6.5.0-1014-aws x86_64)
* Documentation: https://help.ubuntu.com
* Management: https://landscape.canonical.com
* Support: https://ubuntu.com/advantage
* Welcome to the Codio Terminal!
* https://docs.codio.com/develop/develop/ide/boxes/overview
* Your Codio Box domain is: speechmaze-yogurtparody.codio.io
Last login: Thu Apr 11 17:12:53 2024 from 192.168.10.226
codio@speechmaze-yogurtparody:~/workspace$ myswl
-bash: myswl: command not found
codio@speechmaze-yogurtparody:~/workspace$ use QuantigrationUpdates;
-bash: use: command not found
codio@speechmaze-yogurtparody:~/workspace$ mysq;
-bash: mysq: command not found
codio@speechmaze-yogurtparody:~/workspace$ mysql
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 12
Server version: 8.0.31-0ubuntu0.22.04.1 (Ubuntu)
Copyright (c) 2000, 2022, Oracle and/or its affiliates.
Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
mysql> use QuantigrationUpdates;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A
Database changed
mysql> select * from Orders into outfile '/home/codio/workspace/Project_1.csv' fields terminated by ',' enclosed by '"' lines terminated by '\n';
Query OK, 37997 rows affected (0.06 sec)
mysql>