# DAD 220 Database Documentation

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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 located in the Project One Supporting Materials for assistance.

## Step One: Create a Database

1. Navigate to your online integrated development environment (IDE). Here, you will need to write the proper SQL commands in command line to create tables that demonstrate relationships based on the entity relationship diagram. List and record the SQL commands that you used to complete this step here:

Text

Description automatically generated

[Here is the typing of ‘mysql’ which opens up the mysql prompts!]

1. Create a database schema called *QuantigrationUpdates*. List out the database name. Provide the SQL commands you ran against MySQL to successfully complete this in your answer:

Text

Description automatically generated

[The simple, ‘create database’ command generates a new database with a specified name. No tables have been added to this database yet, just the name with 1 row affected. ‘Showing databases’ just shows the database, as required.]

1. Using the ERD as a reference, **create the following tables with the appropriate attributes and keys**:
   1. A table named **customers** in the *QuantigrationUpdates* database as defined on the project ERD. Provide the SQL commands you ran against MySQL to complete this successfully in your answer:

Text

Description automatically generated

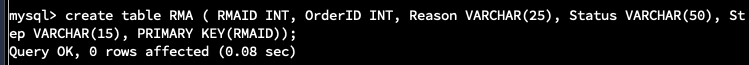
[Again, learning with mysql has been so very easy, that something as simple as ‘create table’, is how you create a table. Then, CustomerID is an integer, and FirstName is a set of variable characters with a maximum length of 25, and so on and so forth. Setting the primary key of Customers with CustomerID. The primary key will be used in another table, to join the two together in harmony!]

* 1. A table named **orders** in the *QuantigrationUpdates* database as defined on the project ERD. Provide the SQL commands you ran against MySQL to complete this successfully in your answer:



[Creating a table called Orders with, as simply as before, OrderID as an integer, CustomerID as an INT, SKU as a variable character with a maximum length of 20, and so on!]

* 1. A table named **rma** in the *QuantigrationUpdates* database as defined on the project ERD. Provide the SQL commands you ran against MySQL to complete this successfully in your answer:



[The third table created in QuantigrationUpdates, RMAID. Same as before, again. Using RMAID as an integer, OrderID as an integer, and so on.]

1. **Update your existing table** from “Customer” to “Collaborator” using SQL based on this change in requirements. Provide the SQL commands you ran against MySQL to complete this successfully in your answer:

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[Very simple command here, completely plain English. ‘Rename table “Customers” to “Collaborators”’.]

## Step Two: Load and Query the Data

1. **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. You will perform this step three times, once for each table.

Text

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1. **Write basic queries against imported tables to organize and analyze targeted data.** For each query, replace the bracketed text with a screenshot of the query and its output. You should also include a brief, 1- to 3-sentence description of the output.
   * Write an SQL query that returns the count of orders for customers located only in the city of Framingham, Massachusetts.
     1. How many records were returned?

Text

Description automatically generated

[505 records were returned! Using the select and count(\*), and then inner joining orders and customerID with the specific city and state, we can see that there are 505 matches to that request.]

* + Write an SQL query to select all of the customers located in the state of Massachusetts.
    1. Use a WHERE clause to limit the number of records in the customers table to only those who are located in Massachusetts.
    2. Record an answer to the following question: How many records were returned?

Text

Description automatically generated

[Here, there were 982 records returned. Again using the inner join with Orders and Collaborators CustomerID.]

* + Write a SQL query to insert four new records into the orders and customers tables using the following data:
    1. 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 |

Text

Description automatically generated

[Here was a simple insert command that called up the CustomerID, FirstName, LastName, Street, City, State, ZipCode, and Telephone. Using the VARCHARs and INTs together to create different accounts for each person!]

* + 1. 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 |

Text

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[Similar to the previous insert command, but this time into Orders! Using OrderID, CustomerID, SKU, and Description!]

* + In the customers table, perform a query to count all records where the city is Woonsocket, Rhode Island.
    1. How many records are in the customers table where the field “city” equals “Woonsocket”?

Text

Description automatically generated

[7 records have been retrieved from this select statement!]

* + In the rma database, update a customer’s records.
    1. Write an SQL statement to select the current fields of *status* and *step* for the record in the *rma* table with an *orderid* value of “5175.”
       1. What are the current status and step?

Text

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[Again, just showing the status and the step.]

* + 1. Write an SQL statement to update the *status* and *step* for the *orderid*, 5175 to *status* = “Complete” and *step* = “Credit Customer Account.”
       1. What are the updated *status* and *step* values for this record?

Text

Description automatically generated

[Here is the changing of the status and step of OrderID number 5175!]

* + Delete rma records.
    1. Write an SQL statement to delete all records with a reason of “Rejected.”
       1. How many records were deleted?



[A simple deletion of ALL the records with the reason of Rejected.]

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

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[Here the output file has been created with the name Orders3.csv, because I have already used Orders.csv and Order2.csv. Simple as that!]