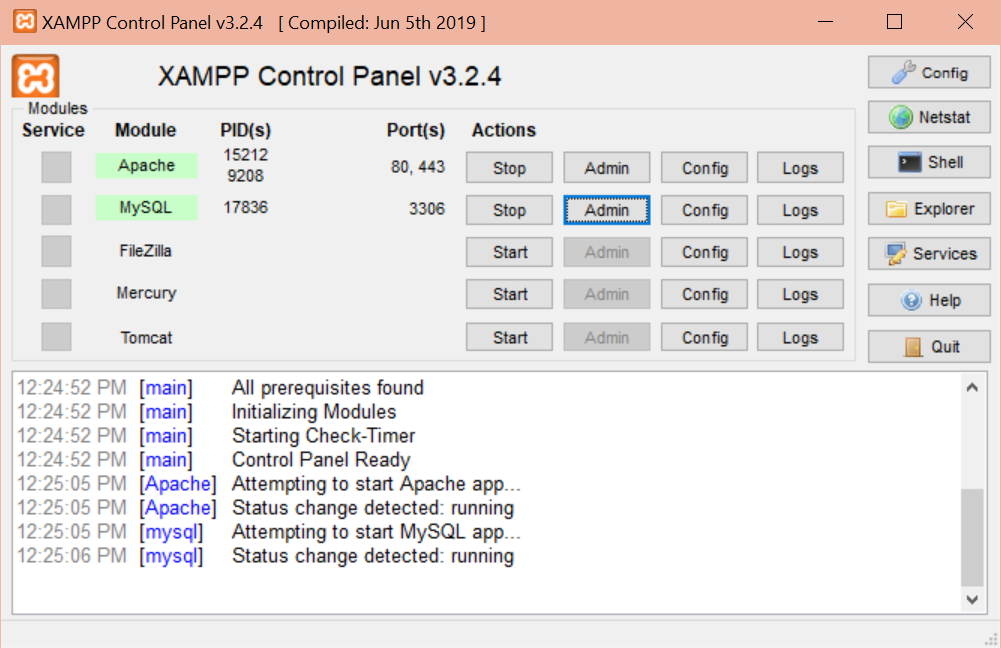
**ACTIVITY 2.1:** **Basic SQL Command – No constraints and Referential Integrity**

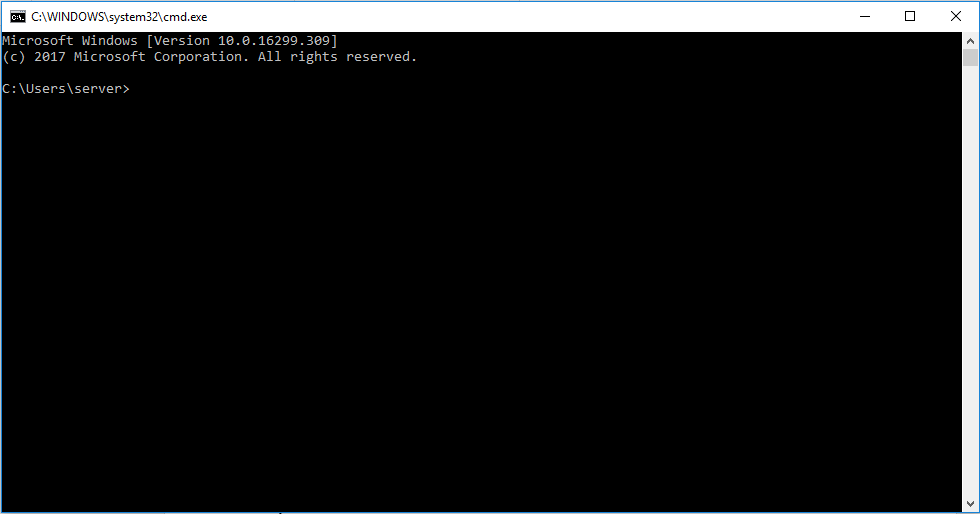
**Setting-up Command Prompt**

1. Start your XAMPP control panel and the make sure to hit on START button to Apache and MySQL.

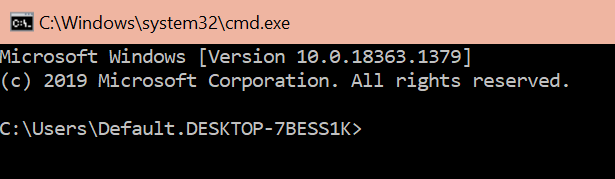
**My XAMPP control panel:**



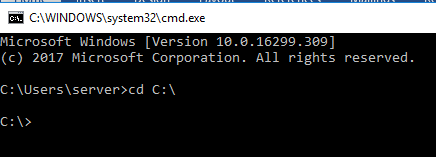
1. On your keyboard, key in  to run command prompt.
2. Type **“cmd”** in the field provided and then click **OK** or hit **‘ENTER’**.
3. You will be shown the command prompt similar to the display below:



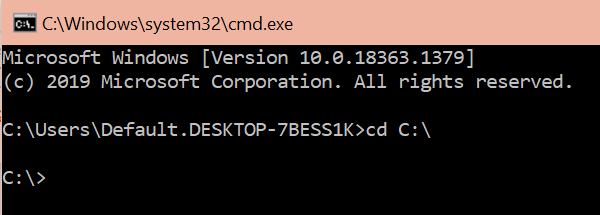
**My command prompt:**



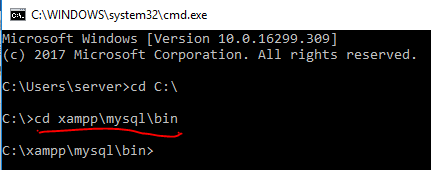
1. By using the command below, it means you’re changing directory to drive **C:\.**



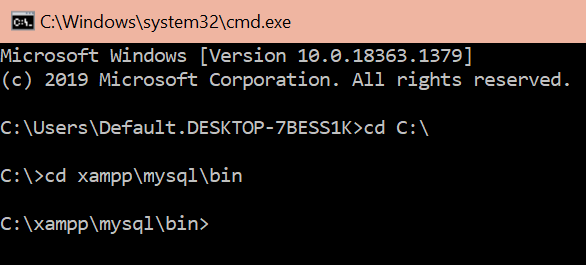
**My command prompt:**



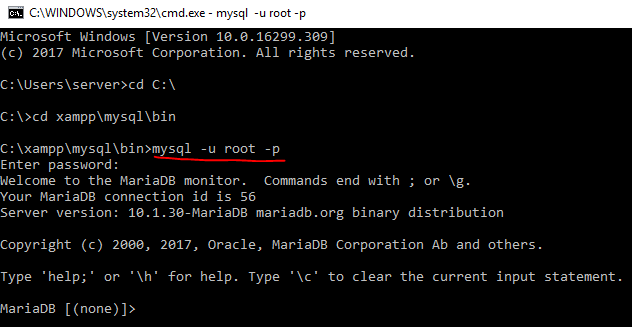
1. Now, invoke the following commands below then hit **ENTER**.



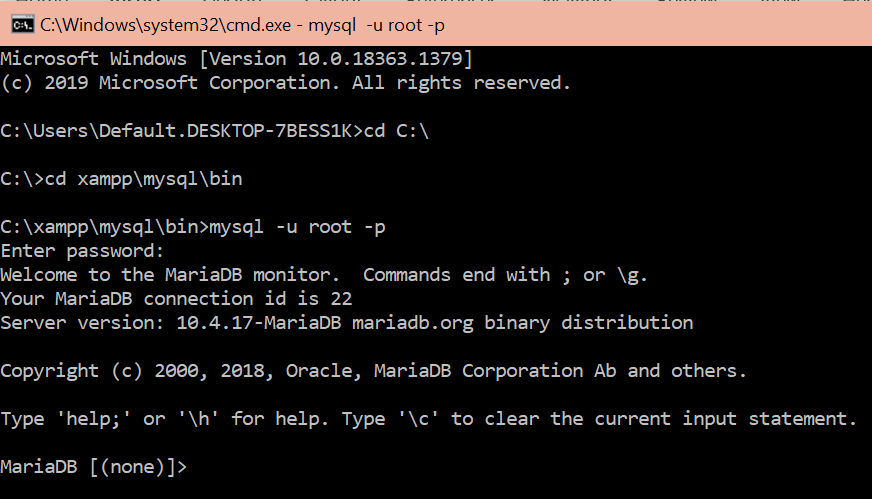
**My command prompt:**



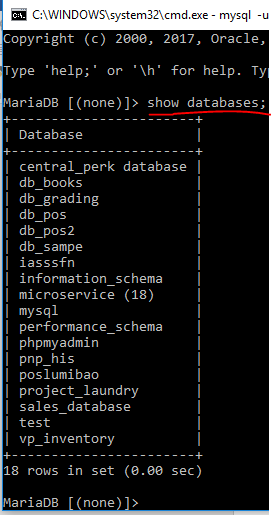
1. See commands underlined in red. Just hit **ENTER** all throughout until you will see this:



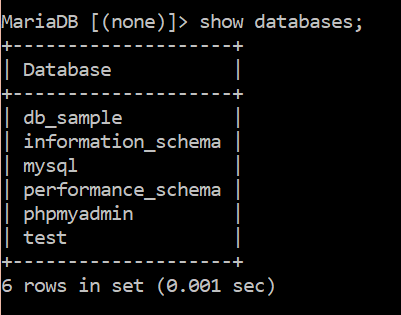
**My command prompt:**



1. Now, you are all set. You can show database files on your localhost by invoking command below:



**My command prompt:**



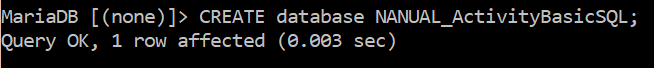
***---------------------- [DDL-Table Structures and Specifications] ----------------------***

1. Create a database with a name following the format **<your last name>\_activityBasicSQL**

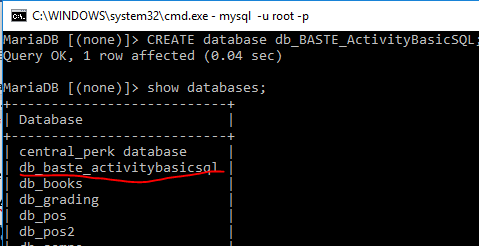
Example: ***BASTE\_ActivityBasicSQL.***



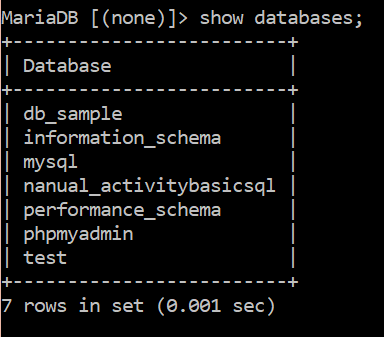
**My command prompt:**



1. To show if a database is created, use the following command: ***SHOW databases;***



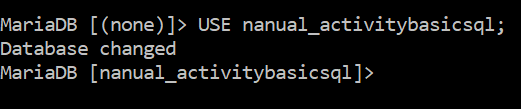
**My command prompt:**



1. Now, every time you want to invoke changes to a certain database like adding tables, changing name of the tables, etc you will need to use the **USE** ***database\_name*** command. Below is an example:



**My command prompt:**

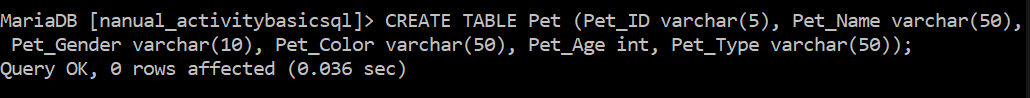


1. Now let’s get started by creating tables on your database.
2. Write a database description (tables) for each of the relation shown below using DDL (Data Definition Language).
3. Create a table **“Pet”.** Your table should have the following fields: Pet\_ID, Pet\_Name, Pet\_Gender, Pet\_Color, Pet\_Age , Pet\_Type.

***Your table should be:***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Pet\_ID** | **Pet\_Name** | **Pet\_Gender** | **Pet\_Color** | **Pet\_Age** | **Pet\_Type** |

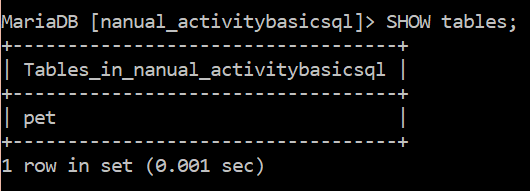
**My command prompt:**



1. To show the tables you have created you can use the following statement:

***SHOW tables;***

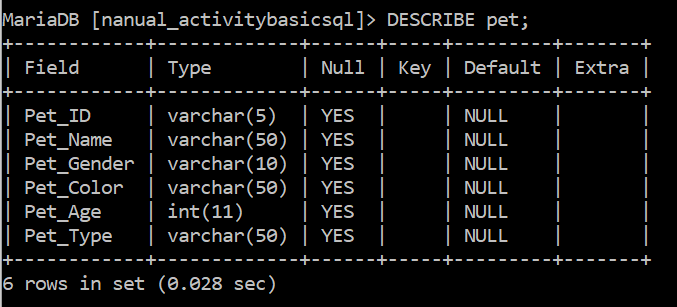
**My command prompt:**



1. If ever you want to look at the **metadata** of a table, you may use either any of the following DDL-SQL statements:

***DESCRIBE tbl\_pet;*** *or* ***SHOW FIELDS FROM tbl\_pet;***

**My command prompt:**



1. In case you want to change the name of your table, you can always change it using the command below:

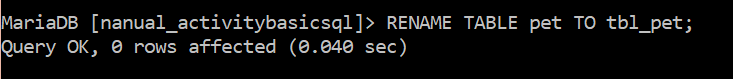
To rename the table, you should use: **Rename table, To** statements.

**Syntax: RENAME TABLE** tb1 **TO** tb2;

**Example: *Rename TABLE pet to pet\_shop;***

Now, try it renaming your table to ***tbl\_pet.***

**My command prompt:**

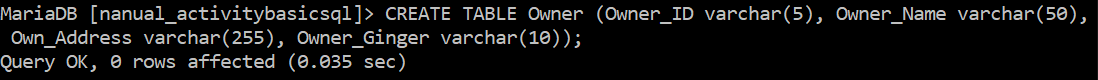


1. Create a table **“Owner”.** Your owner table should have the following fields: Owner\_ID, Owner\_Name, ***Own***\_Address, Owner\_***Ginger***.

***Your table should be:***

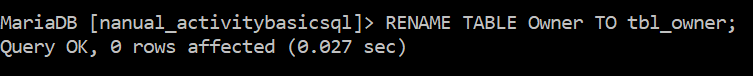
|  |  |  |  |
| --- | --- | --- | --- |
| **Owner\_ID** | **Owner\_Name** | **Own\_Address** | **Owner\_Ginger** |

**My command prompt:**



1. Rename table ***owner to tbl\_owner.***

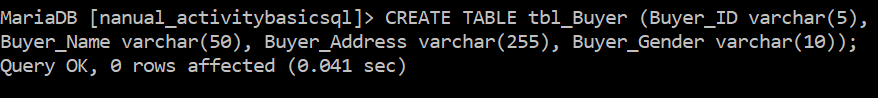
**My command prompt:**



1. Add new table **tbl\_Buyer** with the following specifications:

|  |  |  |  |
| --- | --- | --- | --- |
| **Buyer\_ID** | **Buyer\_Name** | **Buyer\_Address** | **Buyer\_Gender** |

**My command prompt:**



1. Using your tbl\_pet table, add the following fields: ***Pet\_Breed, Pet\_Price, Pet\_contact, Pet\_address.***

***Hint****: Use the keyword* ***Alter*.**

The **SQL ALTER TABLE** statement is used to add, modify, or drop/delete columns in a table.

The **SQL ALTER TABLE** statement is also used to rename a table.

**Syntax:** To add a column\fields in a table, the SQL ALTER TABLE syntax is:

***ALTER TABLE table\_name ADD column\_name column\_definition;***

**Example: *ALTER TABLE tbl\_pet add pet\_address varchar (30);***

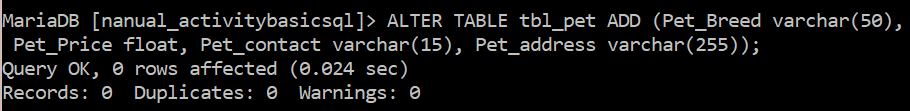
Let's look at SQL ALTER TABLE example that adds more than one column\fields.

***ALTER TABLE tbl\_pet ADD (pet\_address varchar(50), pet\_age int(2));***

***Your table tbl\_pet should have the following fields:***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Pet\_ID** | **Pet\_Name** | **Pet\_Gender** | **Pet\_Color** | **Pet\_Age** | **Pet\_Type** | **Pet\_Breed** | **Pet\_Price** | **Pet\_contact** | **Pet\_address** |

**My command prompt:**



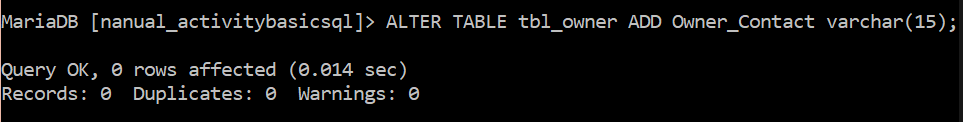
1. Add 1 new column or fields for tbl\_owner : **Owner\_Contact.**

**Hint: Use Alter, Add.**

***Your table should be***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Owner\_ID** | **Owner\_Name** | **Own\_Address** | **Owner\_Ginger** | **Owner\_Contact** |

**My command prompt:**



1. Rename the columns or fields ***own\_address to owner\_address, then owner\_ginger to owner\_gender*** of tbl\_owner***.***

**RENAME COLUMN IN TABLE**

To rename a column in an existing table, the SQL ALTER TABLE syntax is:

***ALTER TABLE table\_name CHANGE COLUMN old\_name new\_name datatype;***

**Example:**

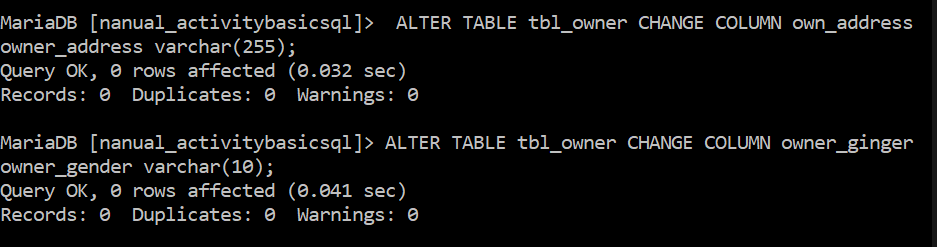
***ALTER TABLE tbl\_owner CHANGE COLUMN own\_address owner\_address VARCHAR(100);***

***Your table should be***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Owner\_ID** | **Owner\_Name** | **Owner\_Address** | **Owner\_Ginger** | **Owner\_Contact** |

***Now, try changing for owner\_ginger to owner\_gender.***

**My command prompt:**



1. Remove the column ***pet\_contact and pet\_address from tbl\_pet***.

**Hint: Alter, Drop**

**DROP COLUMN IN TABLE**

To drop a column in an existing table, the SQL ALTER TABLE syntax is:

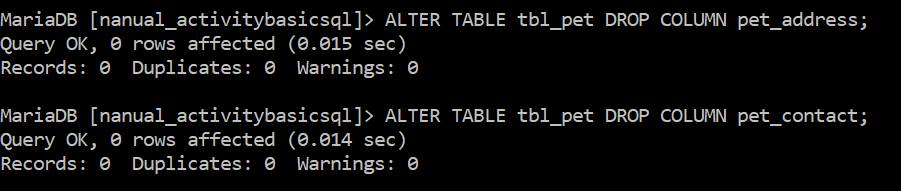
***ALTER TABLE table\_name DROP COLUMN column\_name;***

***Example:***

***ALTER TABLE tbl\_pet DROP COLUMN pet\_address;***

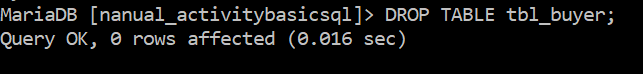
***Now, try removing pet\_contact***

**My command prompt:**



1. Drop/Remove the table **“tbl\_buyer”.**

**My command prompt:**



***---------------------- [DML-Records Manipulation] ----------------------***

***INSERT STATEMENT is used to insert a single record or multiple records into a table in MySQL.***

**SYNTAX**

In its simplest form, the syntax for the INSERT statement when inserting a single record using the VALUES keyword in MySQL is:

*INSERT INTO table (column1, column2, ... )*

*VALUES (expression1, expression2, ... ), (expression1, expression2, ... ),...;*

***Example:***

* 1. If you have the following table definition, here’s how you do it.

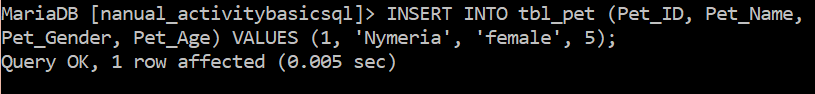
|  |  |  |  |
| --- | --- | --- | --- |
| Pet\_id | Pet\_name | Pet\_gender | Pet\_age |

***Insert into tbl\_pet values (1, ‘Nymeria’,’female’, 5);***

***Your table would become:***

|  |  |  |  |
| --- | --- | --- | --- |
| Pet\_id | Pet\_name | Pet\_gender | Pet\_age |
| ***1*** | ***Nymeria*** | ***female*** | ***5*** |

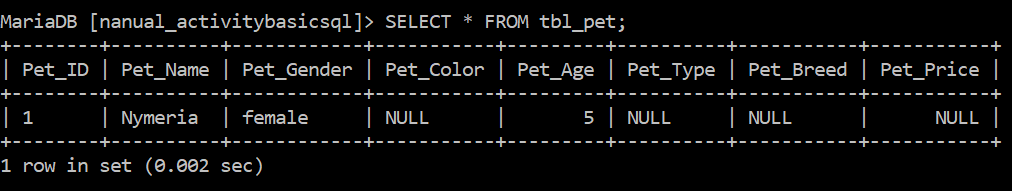
**My command prompt:**



* 1. By using SELECT command, you are able to display the records containing in the **tbl\_pet** table. As you wish, invoke the following statement:

***SELECT \*from tbl\_pet;***

**My command prompt:**



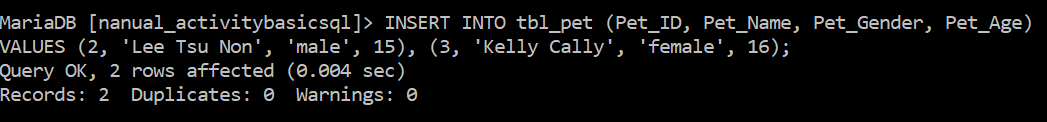
* 1. What if you want to insert 2 or more than rows or records? Here’s how.

***Insert into tbl\_pet values (2, ‘Lee Tsu Non’,’male’, 15), (3, ‘Kelly Cally’,’female’, 16);***

***Your table would become:***

|  |  |  |  |
| --- | --- | --- | --- |
| Pet\_id | Pet\_name | Pet\_gender | Pet\_age |
| 1 | Nymeria | female | 5 |
| ***2*** | ***Lee Tsu Non*** | ***male*** | ***15*** |
| ***3*** | ***Kelly Cally*** | ***female*** | ***16*** |

**My command prompt:**



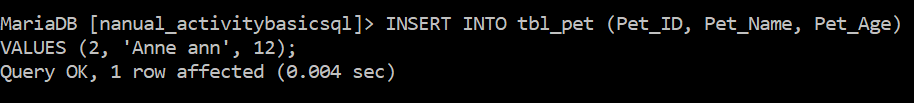
*Or if you want to store only specific value or fields to your table, you do this:*

***Insert into tbl\_pet (pet\_id, pet\_name, pet\_age) values (2, ‘Anne ann’, 12);***

***Your table would have additional information about Anne:***

|  |  |  |  |
| --- | --- | --- | --- |
| Pet\_id | Pet\_name | Pet\_gender | Pet\_age |
| ***2*** | ***Anne ann*** |  | ***12*** |

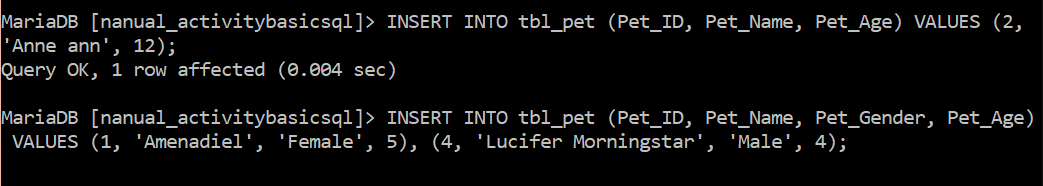
**My command prompt:**



* 1. Using your **tbl\_pet** table, store these values as an additional record:

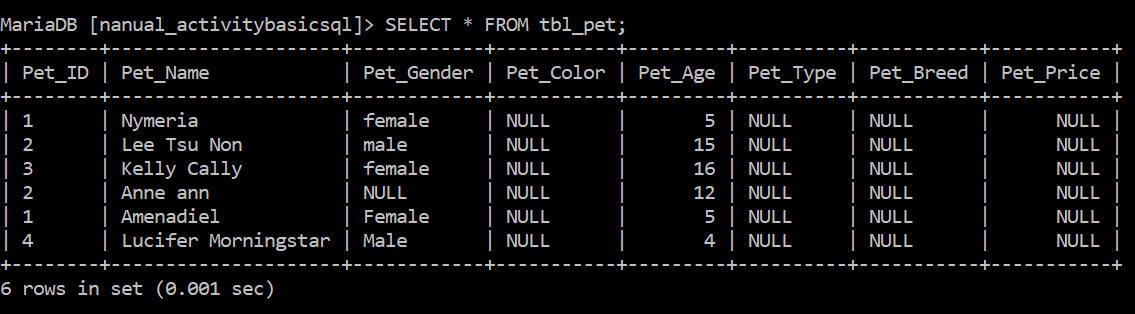
|  |  |  |  |
| --- | --- | --- | --- |
| Pet\_ID | Pet\_Name | Owner\_Gender | Pet\_Age |
| 1 | Amenadiel | Female | 5 |
| 4 | Lucifer Morningstar | Male | 4 |

**My command prompt:**



*Now, show the records of your* ***tbl\_pet*** *table using* ***SELECT*** *command.*

**My command prompt:**



* 1. You just tried removing **tbl\_buyer** table earlier using **DROP** command. This time I want you to use

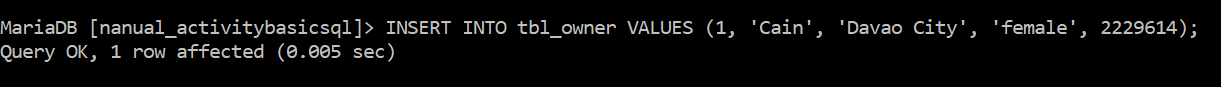
**NOTE:** There are no words after the word “use”. Thus, I left the item as is.

1. Using your **tbl\_owner** table, store these values: ***1,” Cain”, “Davao City”, “female”, 2229614.***

***Your table should become:***

**NOTE:** There are no words or objects after “become:”

**My command prompt:**



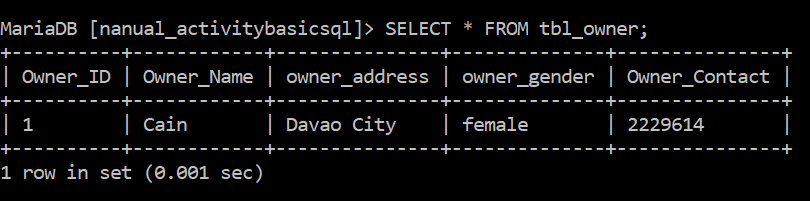
1. Show records of your **tbl\_owner** table using **select** statement. Invoke the SQL statement below to accomplish the task:

***SELECT \*from tbl\_owner;***

You should have shown like this:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Owner\_ID*** | ***Owner\_Name*** | ***Owner\_Address*** | ***Owner\_Gender*** | ***Owner\_Contact*** |
| ***1*** | ***Cain*** | ***Davao City*** | ***Female*** | ***2229614*** |

**My command prompt:**



1. Using the **tbl\_pet** table, store these information (sequence):

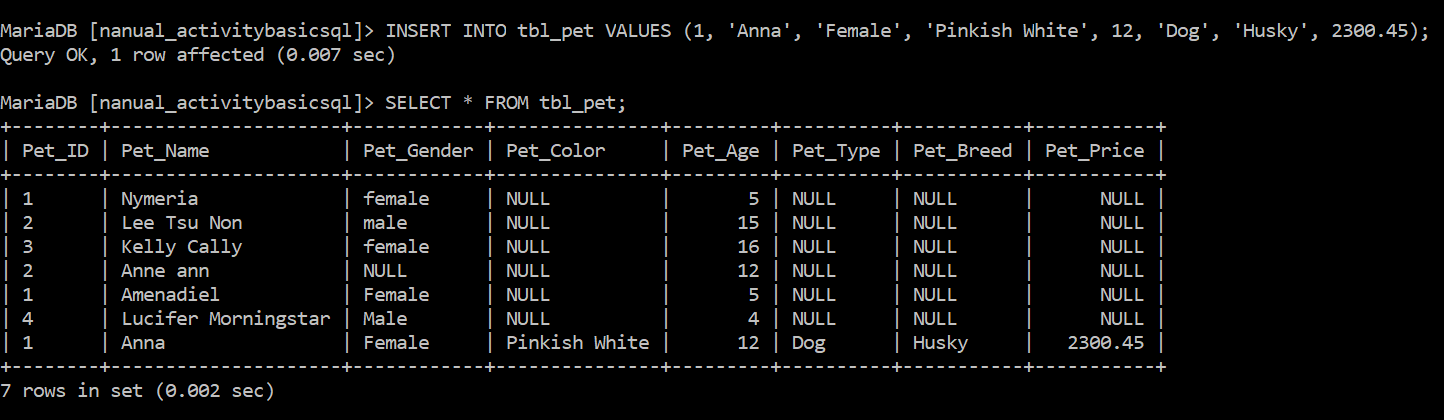
***1, “Anna”, “Female”, “Pinkish White”, 12,’Dog’,”Husky”,*** ***2300.45***. ***(Show your records after)***

Your table should have become:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Pet\_ID | Pet\_Name | Pet\_Gender | Pet\_Color | Pet\_Age | Pet\_Type | Pet\_Breed | Pet\_Price |
| 1 | Anna | female | Pinkish White | 12 | Dog | Husky | 8900.00 |

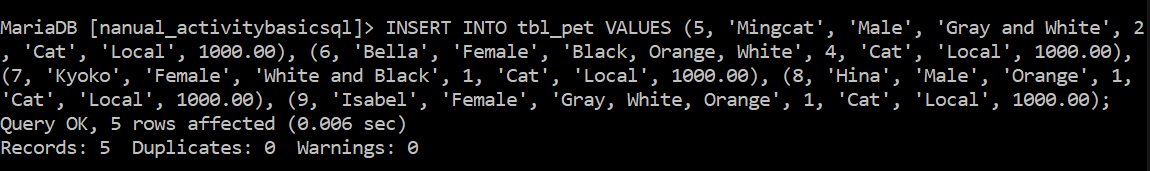
**NOTE:** The Pet\_Price values in the instruction and in the table do not match. (Instruction says 2300.45 while the table says 8900.00. I went with what is being asked in the instruction.

**My command prompt:**



1. Insert information for **tbl\_pet** atleast 5 of your own specifications and preference.

**My command prompt:**



1. Insert the following information to your **tbl\_pet**:

**NOTE:** I am unsure what information I’m supposed to add to tbl\_pet. If it is the information in the table below, they have already been added to the table in the previous instructions.

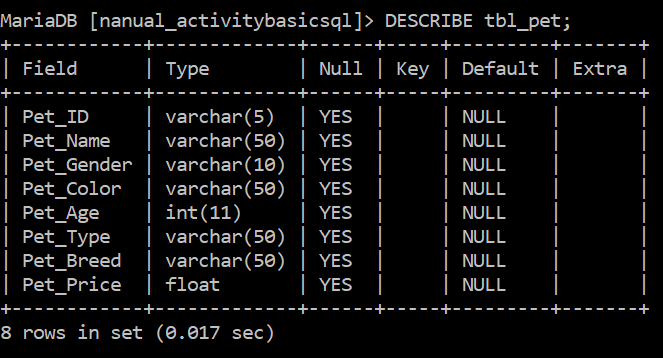
(***Look at the table below carefully of what columns or fields are used upon storing values.***)

|  |  |  |  |
| --- | --- | --- | --- |
| Pet\_id | Pet\_name | Pet\_gender | Pet\_age |
| 1 | Nymeria | female | 5 |
| 2 | Lee Tsu Non | male | 15 |
| 3 | Kelly Cally | female | 16 |
| ***4*** | ***Anne ann*** |  | ***12*** |

***NOTE: Observe that you are able to store information of pet having the same Pet\_id since it wasn’t specified as primary key. Hence, duplication is possible.***

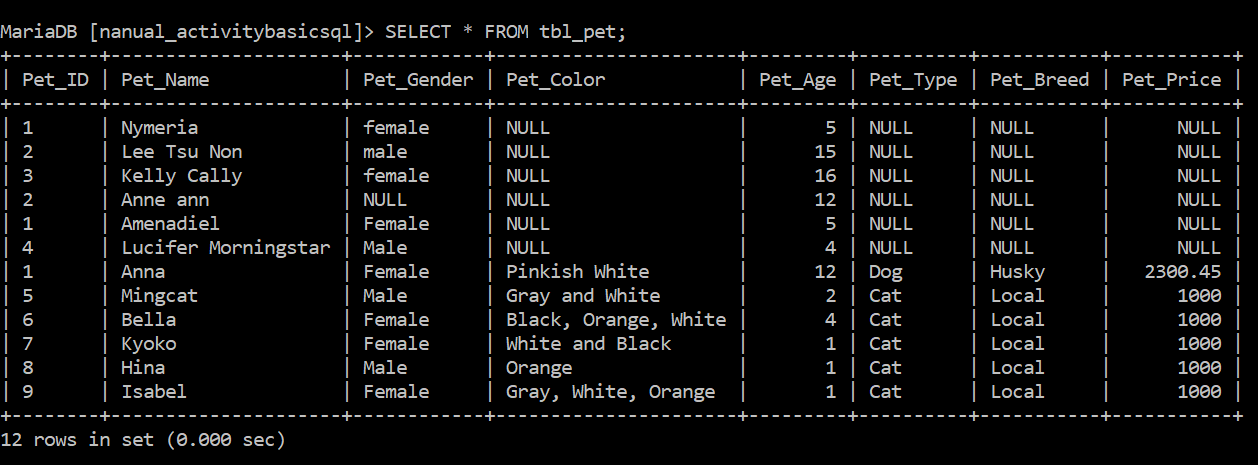
1. Display all fields from the table **tbl\_pet.**

**My command prompt:**



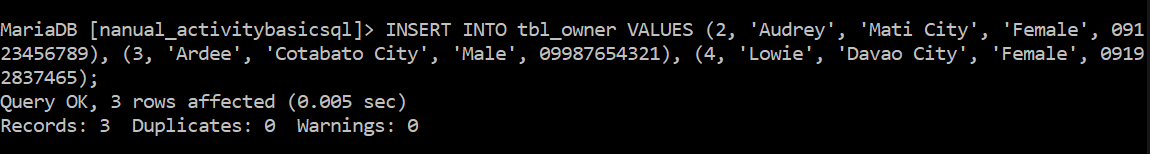
1. Show records of your **tbl\_pet.**

**My command prompt:**



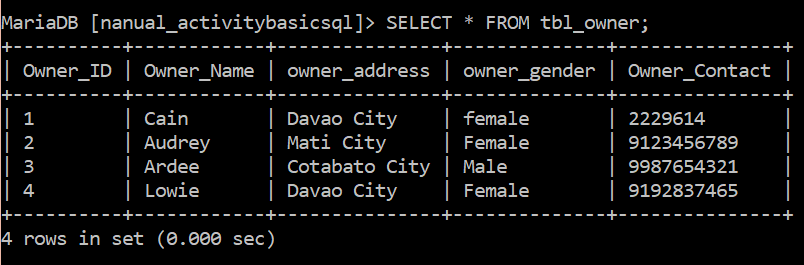
1. Insert information to your table **tbl\_owner** atleast 3 of your own specifications and preference.

**My command prompt:**



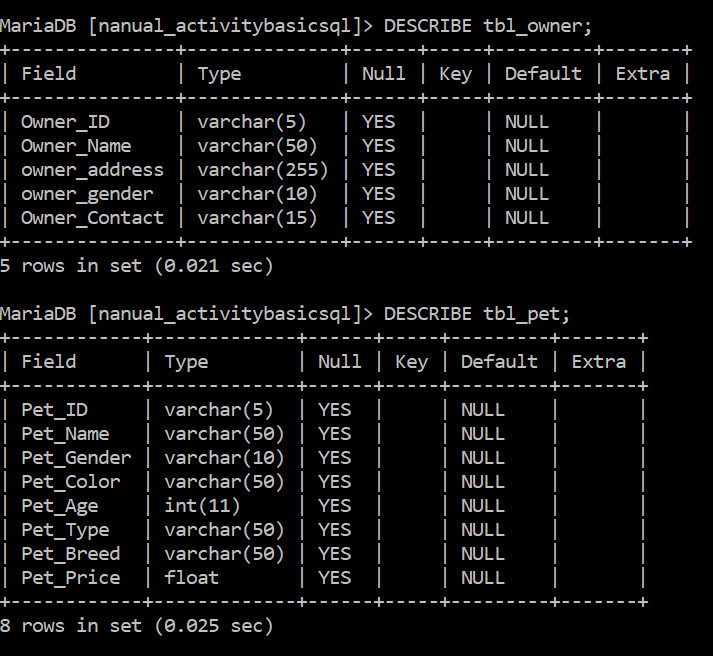
1. Show records of your **tbl\_owner.**

**My command prompt:**



1. Display data dictionary of **tbl\_owner and tbl\_pet.**

**My command prompt:**



1. Remove the table **tbl\_owner.**

**Hint: Use drop command.**

**My command prompt:**

