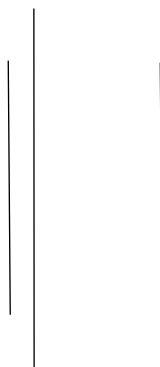


NEPAL COLLEGE OF INFORMATION TECHNOLOGY
BALKUMARI, LALITPUR



A LAB REPORT
ON
WEB TECHNOLOGY



TITLE: Getting started with XAMPP

Submitted By:

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Faculty: Science and Technology

Semester: Second Semester

Submitted To:

Instructor: Ashok

Department of:

SQL SELECT

The SELECT statement is used to select data from a database.

Syntax:

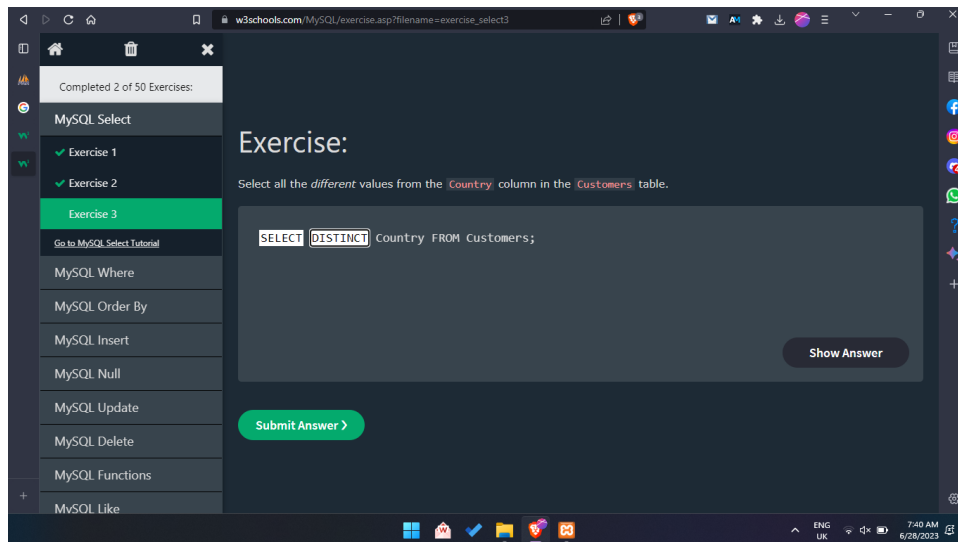
SELECT * FROM table_name; [* selects all columns, user can specify specific column to be selected]

Exercises related to SELECT:

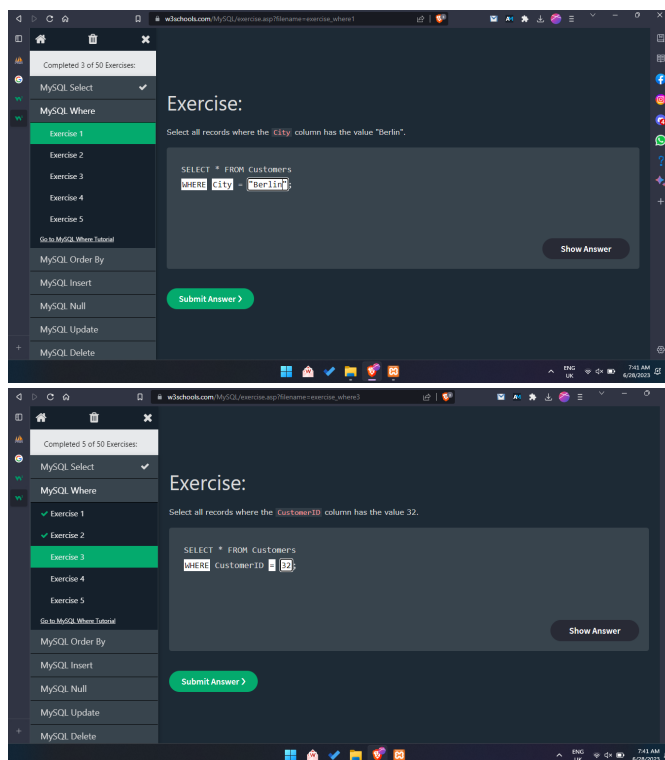
The screenshot shows a web browser window at [w3schools.com/MySQL/exercise.asp?filename=exercise_select1](https://www.w3schools.com/MySQL/exercise.asp?filename=exercise_select1). On the left, a sidebar lists navigation options: 'Completed 0 of 50 Exercises', 'MySQL Select', 'Exercise 1' (highlighted), 'Exercise 2', 'Exercise 3', 'Go to MySQL Select Tutorial', 'MySQL Where', 'MySQL Order By', 'MySQL Insert', 'MySQL Null', 'MySQL Update', 'MySQL Delete', 'MySQL Functions', and 'MySQL Like'. The main content area is titled 'Exercise:' and contains the instruction: 'Insert the missing statement to get all the columns from the `Customers` table.' Below this, a text input field contains the SQL code: `SELECT * FROM Customers;`. To the right of the input field is a 'Show Answer' button. Below the input field is a 'Submit Answer >' button. The Windows taskbar at the bottom shows the time as 7:39 AM on 6/28/2023.

The screenshot shows the same w3schools MySQL exercise interface, but for Exercise 2, with the URL [w3schools.com/MySQL/exercise.asp?filename=exercise_select2](https://www.w3schools.com/MySQL/exercise.asp?filename=exercise_select2). In the sidebar, 'Exercise 1' is now marked with a green checkmark, and 'Exercise 2' is highlighted. The main content area is titled 'Exercise:' and contains the instruction: 'Write a statement that will select the `City` column from the `Customers` table.' The text input field contains the SQL code: `SELECT city FROM Customers;`. The 'Show Answer' and 'Submit Answer >' buttons are still present. The Windows taskbar at the bottom shows the time as 7:39 AM on 6/28/2023.

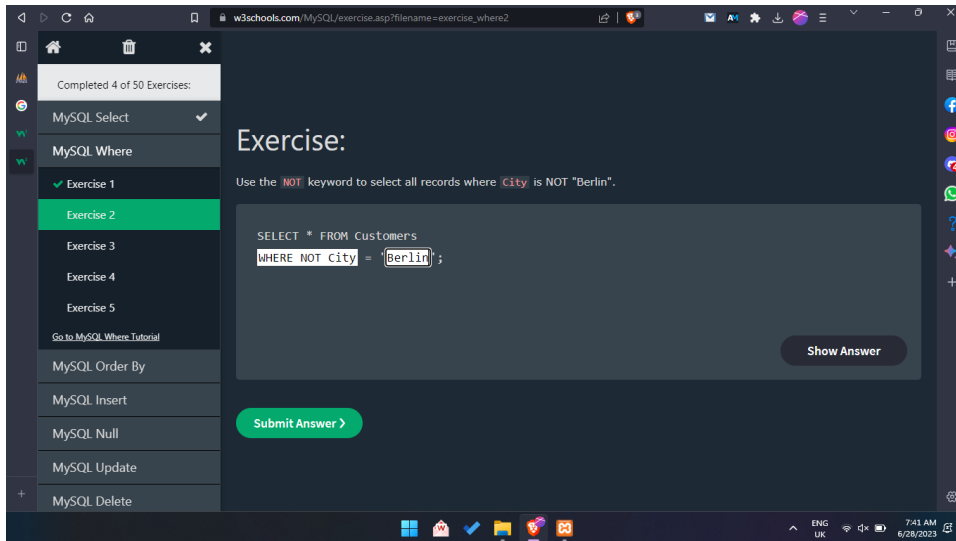
SELECT DISTINCT selects only the distinct values from the column (The first appearing value in case of multiple copies of same value)



WHERE ColumnName = "Term" [This searches for all the elements with name "Term" in the column ColumnName]



WHERE NOT ColumnName = "Term" [This searches for all the elements which doesn't match the name "Term" in the column ColumnName]

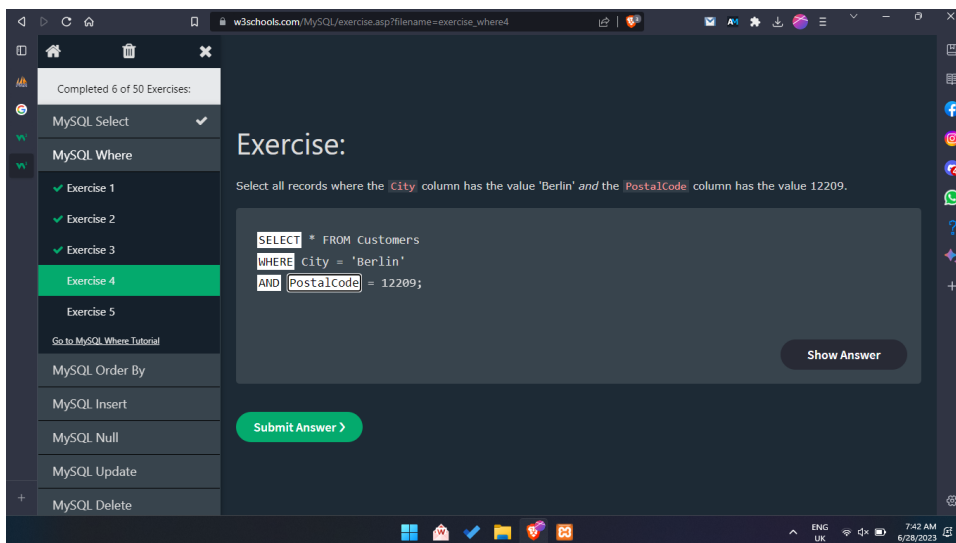


The screenshot shows the w3schools.com MySQL exercise interface. On the left, a sidebar lists various SQL topics, with 'MySQL Where' and 'Exercise 2' highlighted. The main area is titled 'Exercise:' and contains the instruction: 'Use the NOT keyword to select all records where City is NOT "Berlin".' Below this, a code editor shows the SQL query:

```
SELECT * FROM Customers  
WHERE NOT City = 'Berlin';
```

 There are 'Submit Answer' and 'Show Answer' buttons. The bottom status bar shows the time as 7:41 AM on 6/28/2023.

AND allows to search for items that matches both conditions of WHERE



The screenshot shows the w3schools.com MySQL exercise interface for 'Exercise 4'. The sidebar highlights 'MySQL Where' and 'Exercise 4'. The main area is titled 'Exercise:' and contains the instruction: 'Select all records where the City column has the value 'Berlin' and the PostalCode column has the value 12209.' Below this, a code editor shows the SQL query:

```
SELECT * FROM Customers  
WHERE City = 'Berlin'  
AND PostalCode = 12209;
```

 There are 'Submit Answer' and 'Show Answer' buttons. The bottom status bar shows the time as 7:42 AM on 6/28/2023.

OR allows to search for items that matches one of the conditions of WHERE

The screenshot shows a web browser window at [w3schools.com/MySQL/exercise.asp?filename=exercise_where5](https://www.w3schools.com/MySQL/exercise.asp?filename=exercise_where5). On the left sidebar, under 'MySQL Where', 'Exercise 5' is selected. The main area is titled 'Exercise:' and contains the instruction: 'Select all records where the **City** column has the value 'Berlin' or 'London'.'. Below the instruction is a text input field containing the SQL query:

```
SELECT * FROM Customers
WHERE City = 'Berlin'
OR City = 'London';
```

 To the right of the input field is a 'Show Answer' button. Below the input field is a 'Submit Answer >' button. The bottom of the browser window shows the Windows taskbar with the date 6/28/2023 and time 7:42 AM.

ORDER BY sorts the result alphabetically

The screenshot shows a web browser window at [w3schools.com/MySQL/exercise.asp?filename=exercise_orderby1](https://www.w3schools.com/MySQL/exercise.asp?filename=exercise_orderby1). On the left sidebar, under 'MySQL Order By', 'Exercise 1' is selected. The main area is titled 'Exercise:' and contains the instruction: 'Select all records from the **Customers** table, sort the result alphabetically by the column **City**.'. Below the instruction is a text input field containing the SQL query:

```
SELECT * FROM Customers
ORDER BY City;
```

 To the right of the input field is a 'Show Answer' button. Below the input field is a 'Submit Answer >' button. The bottom of the browser window shows the Windows taskbar with the date 6/28/2023 and time 7:43 AM.

ORDER BY * DESC allows to sort the results in descending alphabetical order.

The screenshot shows a web browser window at the URL `w3schools.com/MySQL/exercise.asp?filename=exercise_orderby2`. On the left, a sidebar lists various MySQL topics, with 'Exercise 2' highlighted in green. The main content area is titled 'Exercise:' and contains the instruction: 'Select all records from the `Customers` table, sort the result reversed alphabetically by the column `City`.' Below this, a text box contains the SQL query: `SELECT * FROM Customers ORDER BY City DESC;`. To the right of the query box is a 'Show Answer' button. Below the query box is a 'Submit Answer >' button. The browser's taskbar at the bottom shows the time as 7:43 AM on 6/28/2023.

IS NULL Selects all the records where the column is empty.

The screenshot shows a web browser window at the URL `w3schools.com/MySQL/exercise.asp?filename=exercise_null1`. On the left, a sidebar lists various MySQL topics, with 'Exercise 1' highlighted in green. The main content area is titled 'Exercise:' and contains the instruction: 'Select all records from the `Customers` where the `PostalCode` column is empty.' Below this, a text box contains the SQL query: `SELECT * FROM Customers WHERE PostalCode IS NULL;`. To the right of the query box is a 'Show Answer' button. Below the query box is a 'Submit Answer >' button. The browser's taskbar at the bottom shows the time as 8:21 AM on 6/28/2023.

IS NOT NULL Selects all the elements where column is not empty.

The screenshot shows a web browser window at [w3schools.com/MySQL/exercise.asp?filename=exercise_null2](https://www.w3schools.com/MySQL/exercise.asp?filename=exercise_null2). On the left, a sidebar lists various MySQL topics, with 'Exercise 2' highlighted in green. The main content area is titled 'Exercise:' and contains the instruction: 'Select all records from the **Customers** where the **PostalCode** column is NOT empty.' Below this, a text box contains the SQL query:

```
SELECT * FROM Customers
WHERE PostalCode IS NOT NULL;
```

 To the right of the query box is a 'Show Answer' button. Below the query box is a green 'Submit Answer >' button. The browser's taskbar at the bottom shows the system time as 8:21 AM on 6/28/2023.

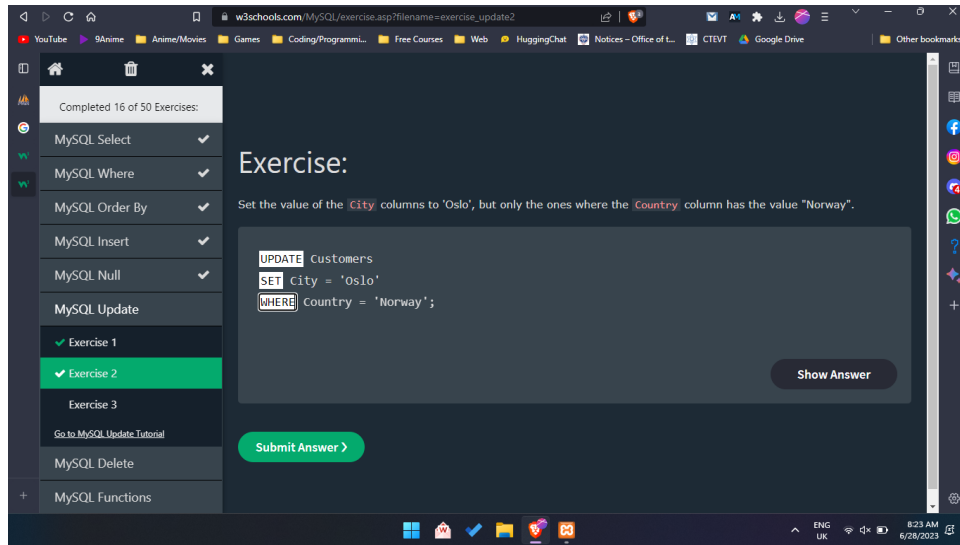
SET Updates the column of all records in the table

The screenshot shows a web browser window at [w3schools.com/MySQL/exercise.asp?filename=exercise_update1](https://www.w3schools.com/MySQL/exercise.asp?filename=exercise_update1). The left sidebar shows 'Exercise 1' highlighted in green. The main content area is titled 'Exercise:' and contains the instruction: 'Update the **City** column of all records in the **Customers** table.' Below this, a text box contains the SQL query:

```
UPDATE Customers
SET City = 'Oslo';
```

 To the right of the query box is a 'Show Answer' button. Below the query box is a green 'Submit Answer >' button. The browser's taskbar at the bottom shows the system time as 8:22 AM on 6/28/2023.

SET ... WHERE to update the column of all where the condition matches.

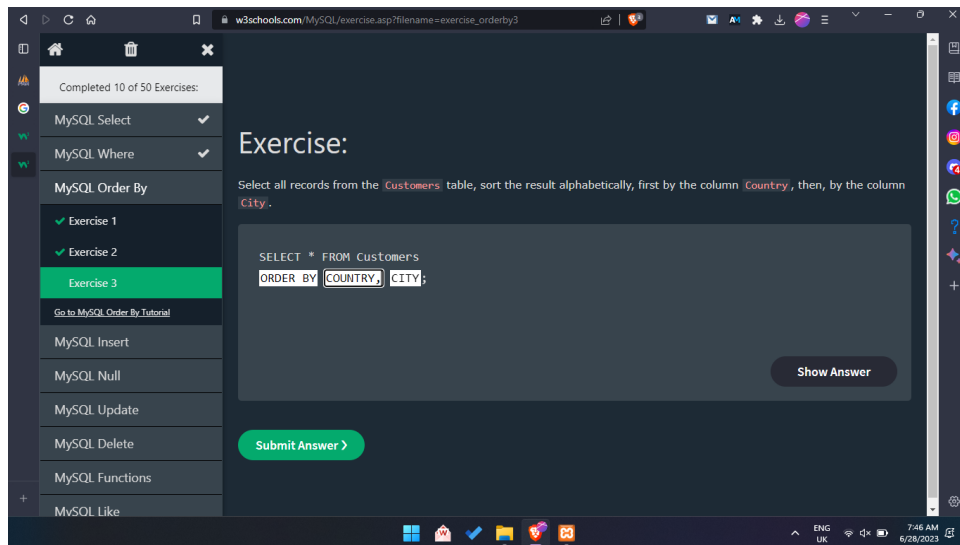


The screenshot shows a web browser window with the URL `w3schools.com/MySQL/exercise.asp?filename=exercise_update2`. The page has a dark theme. On the left, a sidebar lists various MySQL topics: MySQL Select, MySQL Where, MySQL Order By, MySQL Insert, MySQL Null, MySQL Update, Exercise 1, Exercise 2 (highlighted in green), Exercise 3, Go to MySQL Update Tutorial, MySQL Delete, and MySQL Functions. The main content area is titled 'Exercise:' and contains the instruction: 'Set the value of the `City` columns to 'Oslo', but only the ones where the `Country` column has the value "Norway".' Below this, a code editor shows the SQL query:

```
UPDATE Customers
SET City = 'Oslo'
WHERE country = 'Norway';
```

 To the right of the code editor is a 'Show Answer' button. Below the code editor is a 'Submit Answer >' button. The browser's taskbar at the bottom shows the time as 8:23 AM on 6/28/2023.

ORDER BY Column1, Column 2 sorts the table first by Column1 then by Column2.

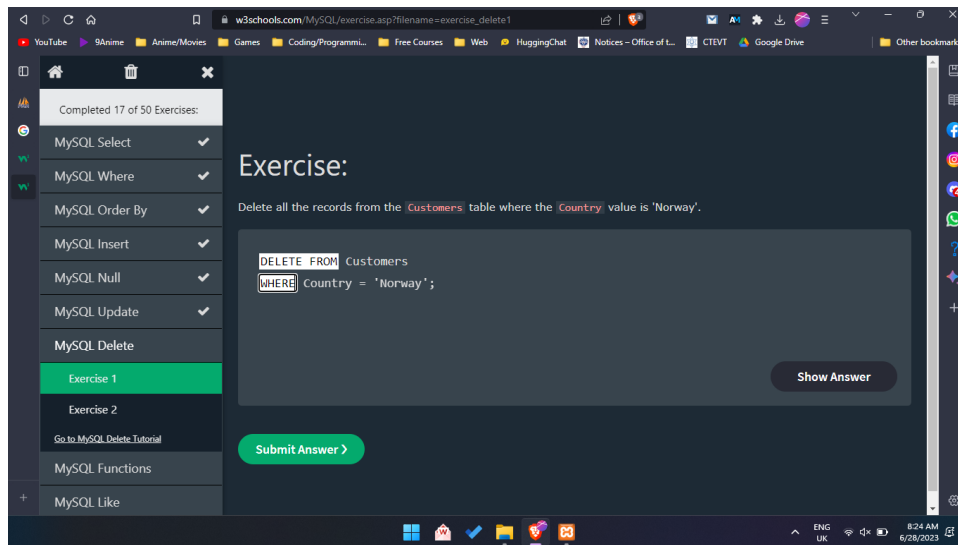


The screenshot shows a web browser window with the URL `w3schools.com/MySQL/exercise.asp?filename=exercise_orderby3`. The page has a dark theme. On the left, a sidebar lists various MySQL topics: MySQL Select, MySQL Where, MySQL Order By, Exercise 1, Exercise 2, Exercise 3 (highlighted in green), Go to MySQL Order By Tutorial, MySQL Insert, MySQL Null, MySQL Update, MySQL Delete, MySQL Functions, and MySQL Like. The main content area is titled 'Exercise:' and contains the instruction: 'Select all records from the `Customers` table, sort the result alphabetically, first by the column `Country`, then, by the column `City`.' Below this, a code editor shows the SQL query:

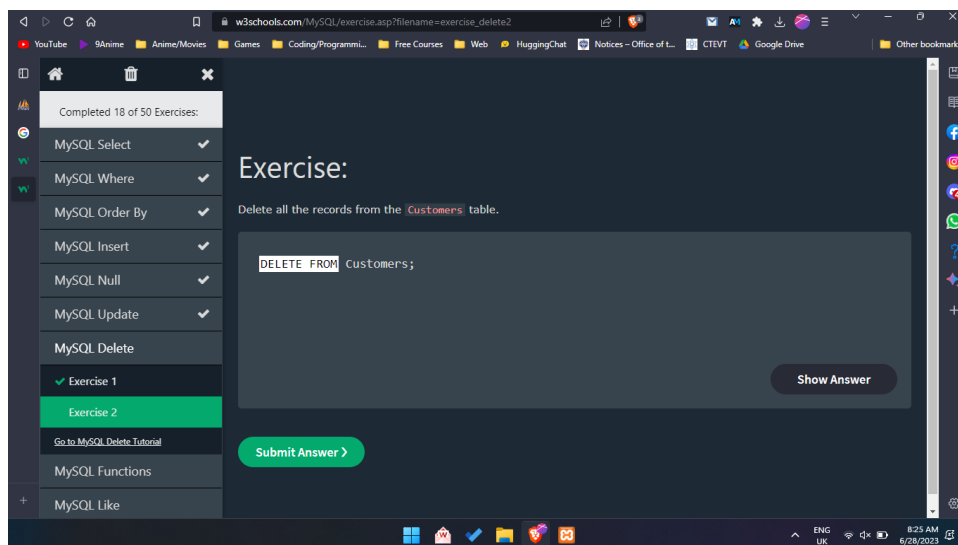
```
SELECT * FROM Customers
ORDER BY COUNTRY, CITY;
```

 To the right of the code editor is a 'Show Answer' button. Below the code editor is a 'Submit Answer >' button. The browser's taskbar at the bottom shows the time as 7:46 AM on 6/28/2023.

DELETE FROM Table1 WHERE ColumnName = “Condition” [Deletes records from the table where the column name condition matches]

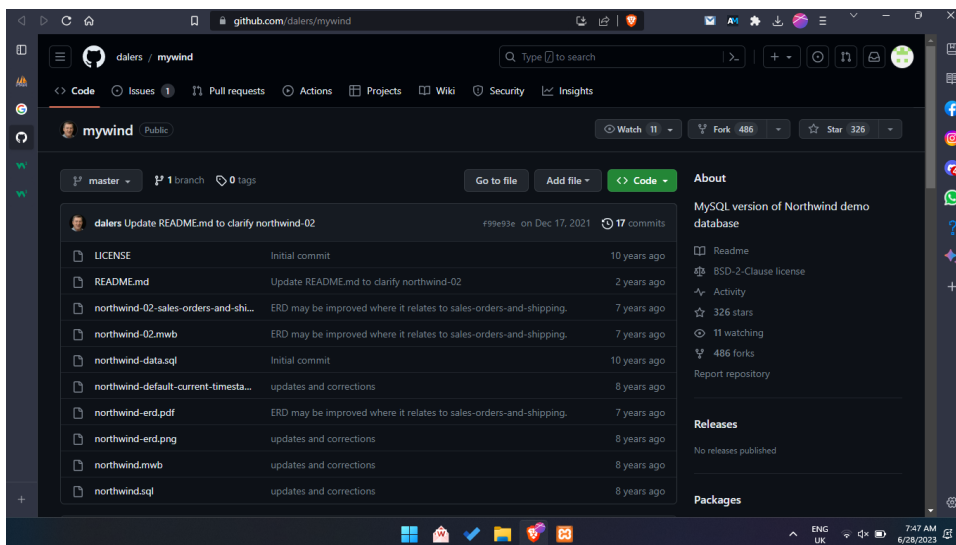
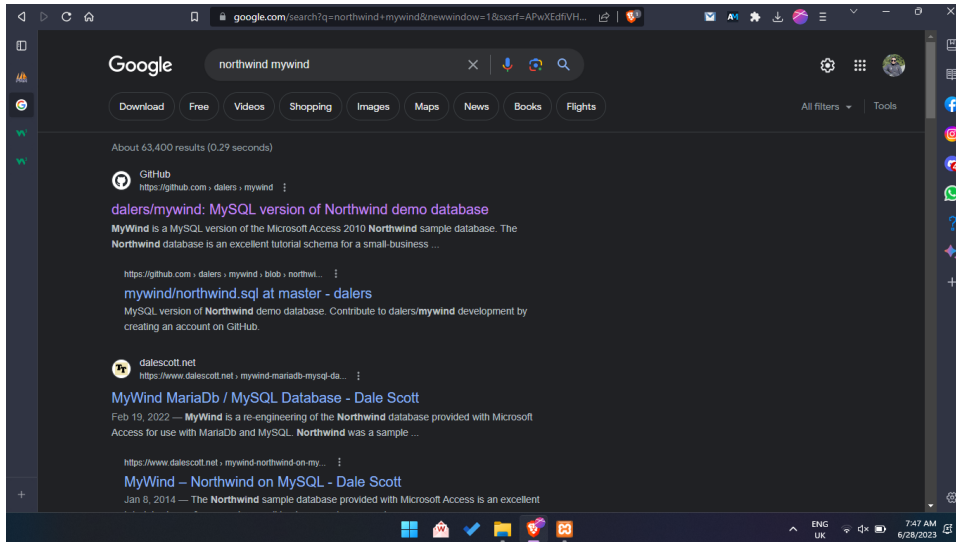


DELETE FROM Table [Deletes all the records from the table but not the table itself]

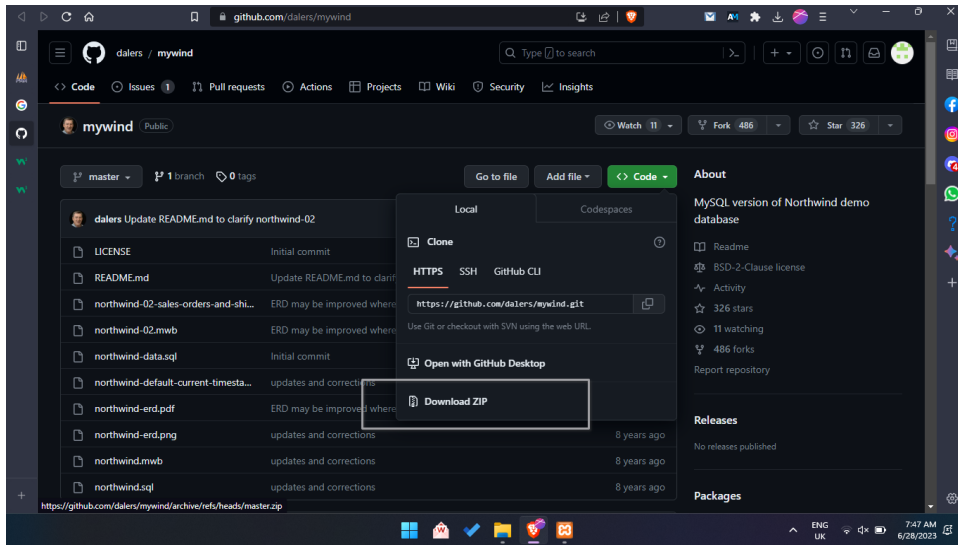


ADDING NORTHWIND DATASET

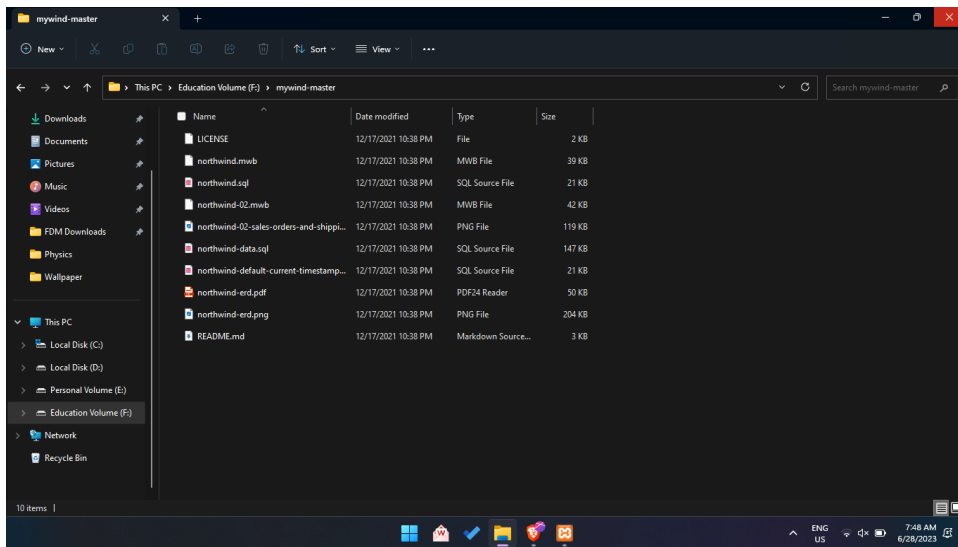
Step 1: Search for “northwind mywind” in your preferred search engine or go to “<https://github.com/dalers/mywind>”



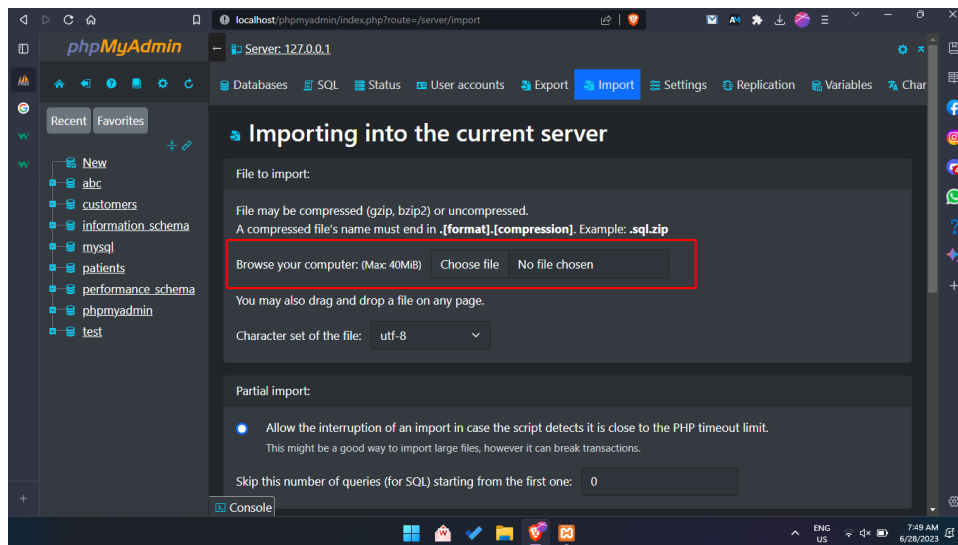
Step 2: Click the green “Code” button and Download the zip.



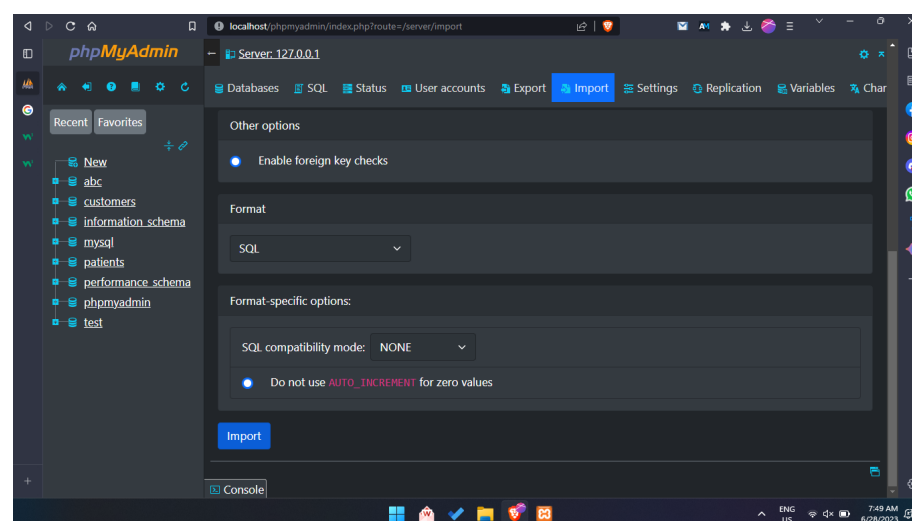
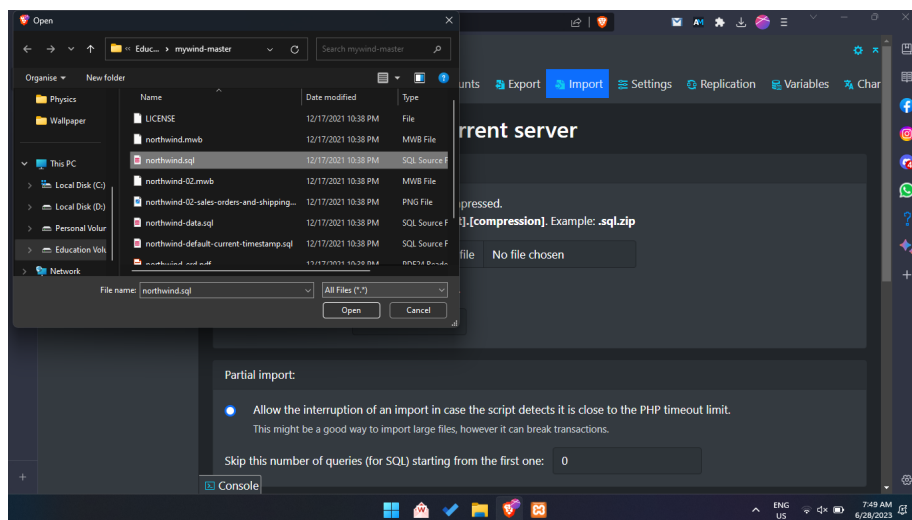
Step 3: Extract the downloaded zip and place the files in your preferred location.



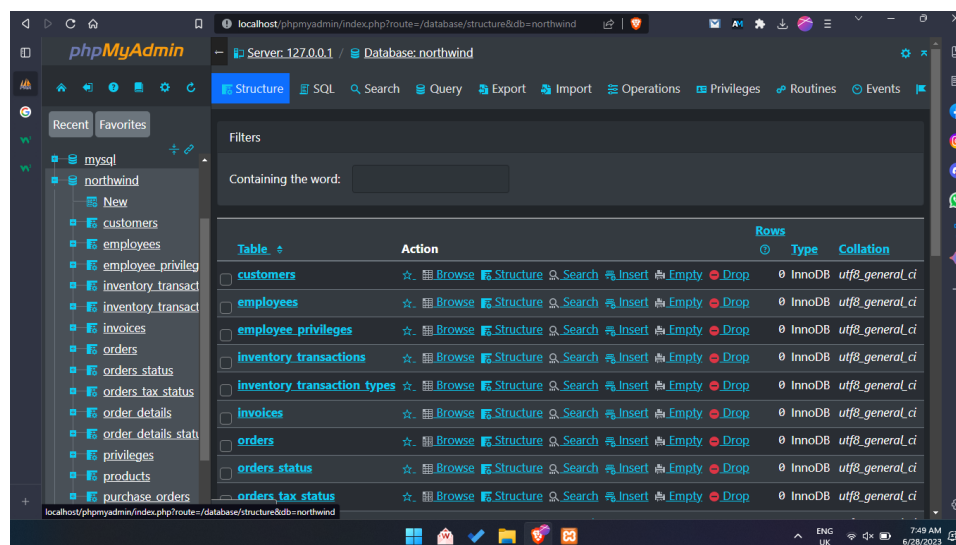
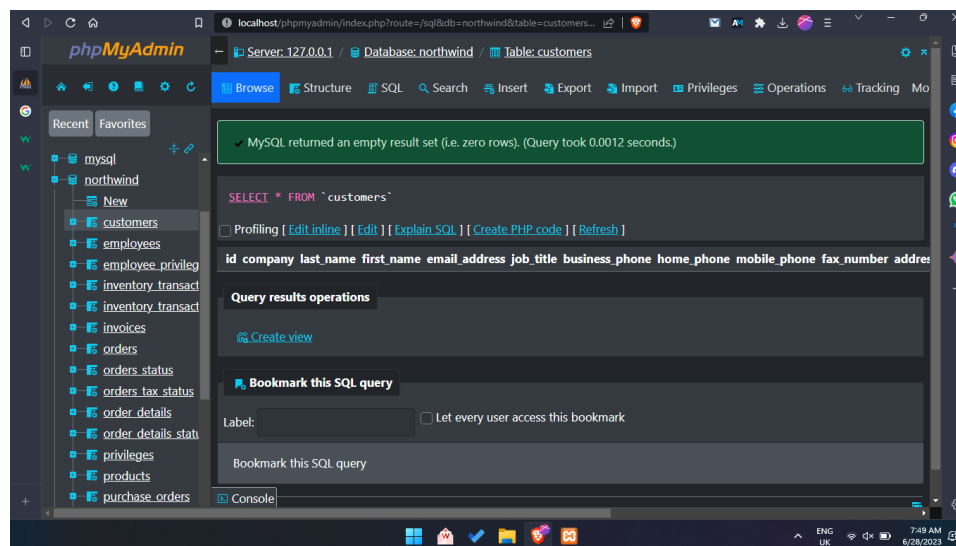
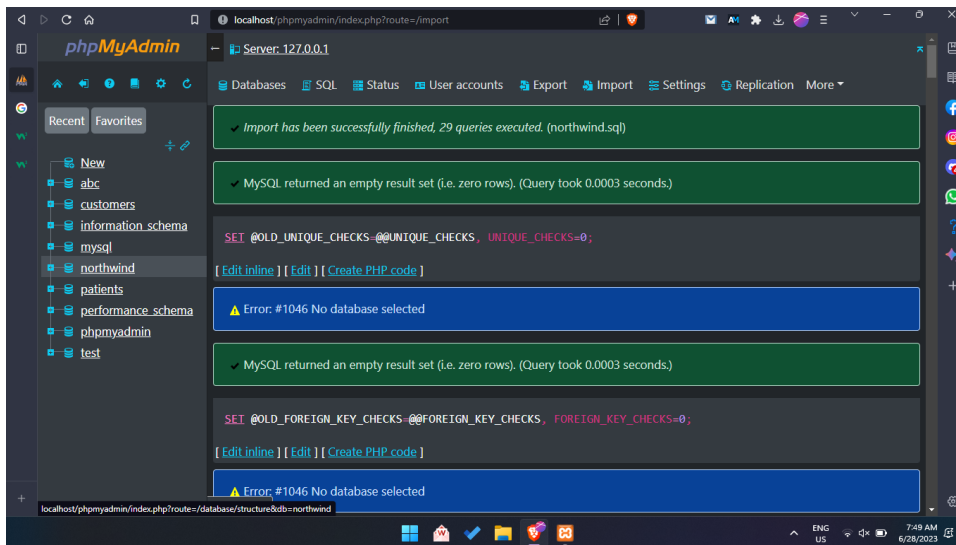
Step 4: Go to “Import” tab in phpMyAdmin and click on Choose File.



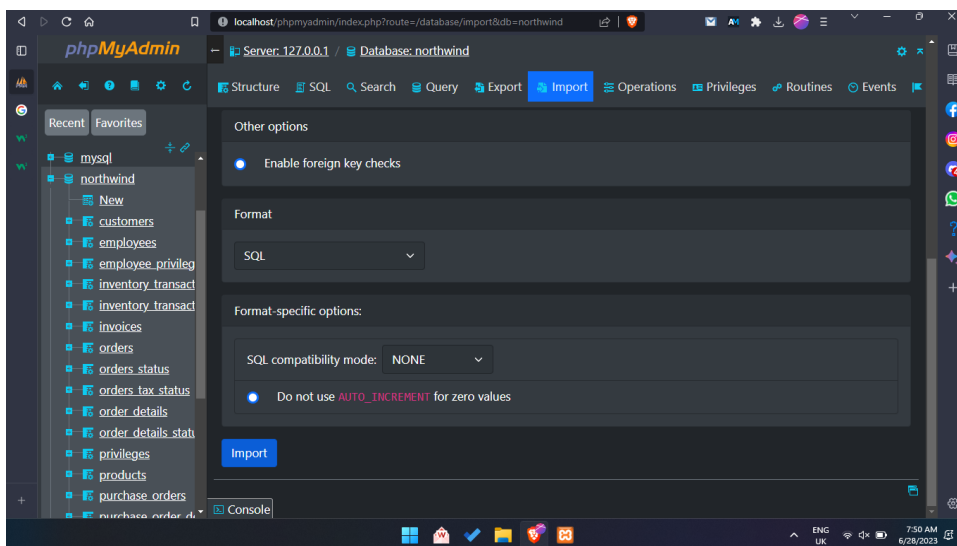
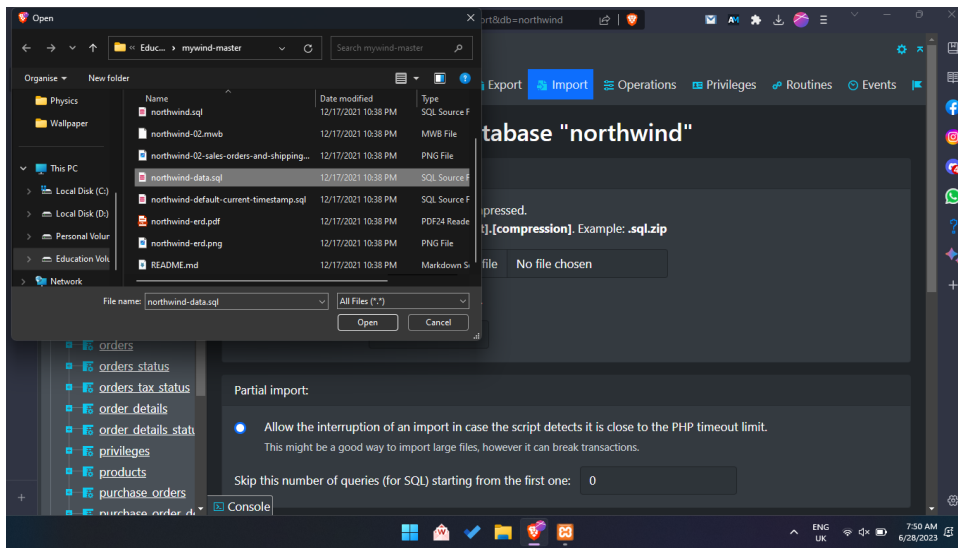
Step 5: Choose the “northwind.sql” file from the extracted files and click on “import”.



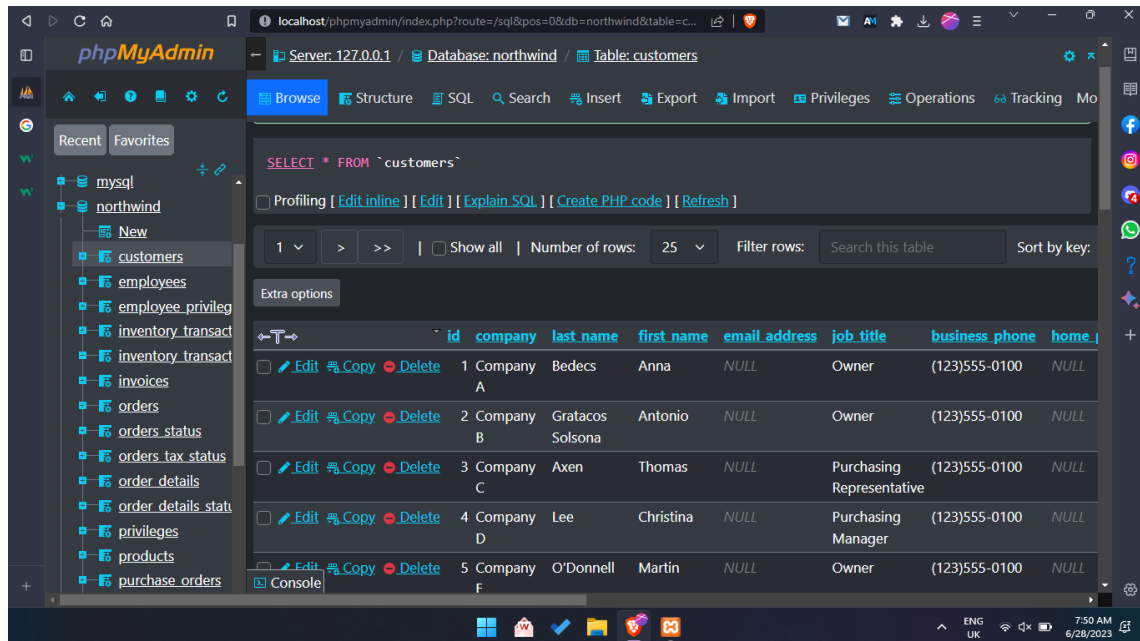
Step 6: The database will be imported but all the tables will be empty.



Step 7: Inside the database, go to import tab and choose the file “northwind-data.sql” to import the dataset into the tables.



Step 8: All the data will be imported and you can now start using the northwind dataset!



The screenshot shows the phpMyAdmin interface with the 'customers' table selected. The table structure and data are as follows:

	id	company	last_name	first_name	email_address	job_title	business_phone	home_p
<input type="checkbox"/>	1	Company A	Bedecs	Anna	NULL	Owner	(123)555-0100	NULL
<input type="checkbox"/>	2	Company B	Gratacos Solsona	Antonio	NULL	Owner	(123)555-0100	NULL
<input type="checkbox"/>	3	Company C	Axen	Thomas	NULL	Purchasing Representative	(123)555-0100	NULL
<input type="checkbox"/>	4	Company D	Lee	Christina	NULL	Purchasing Manager	(123)555-0100	NULL
<input type="checkbox"/>	5	Company F	O'Donnell	Martin	NULL	Owner	(123)555-0100	NULL