

An abstract geometric design on the left side of the slide. It features a dark blue background with various shapes and patterns: a white circle at the top left, a grey semi-circle, a pink hatched triangle, a blue square with concentric circles, a pink square with a white hatched pattern, a grey triangle, and a pink triangle. The text is positioned to the right of these shapes.

WEEK TWO: LAB 2

INFM332

DR. ROLON

BY: DAVID STROUD

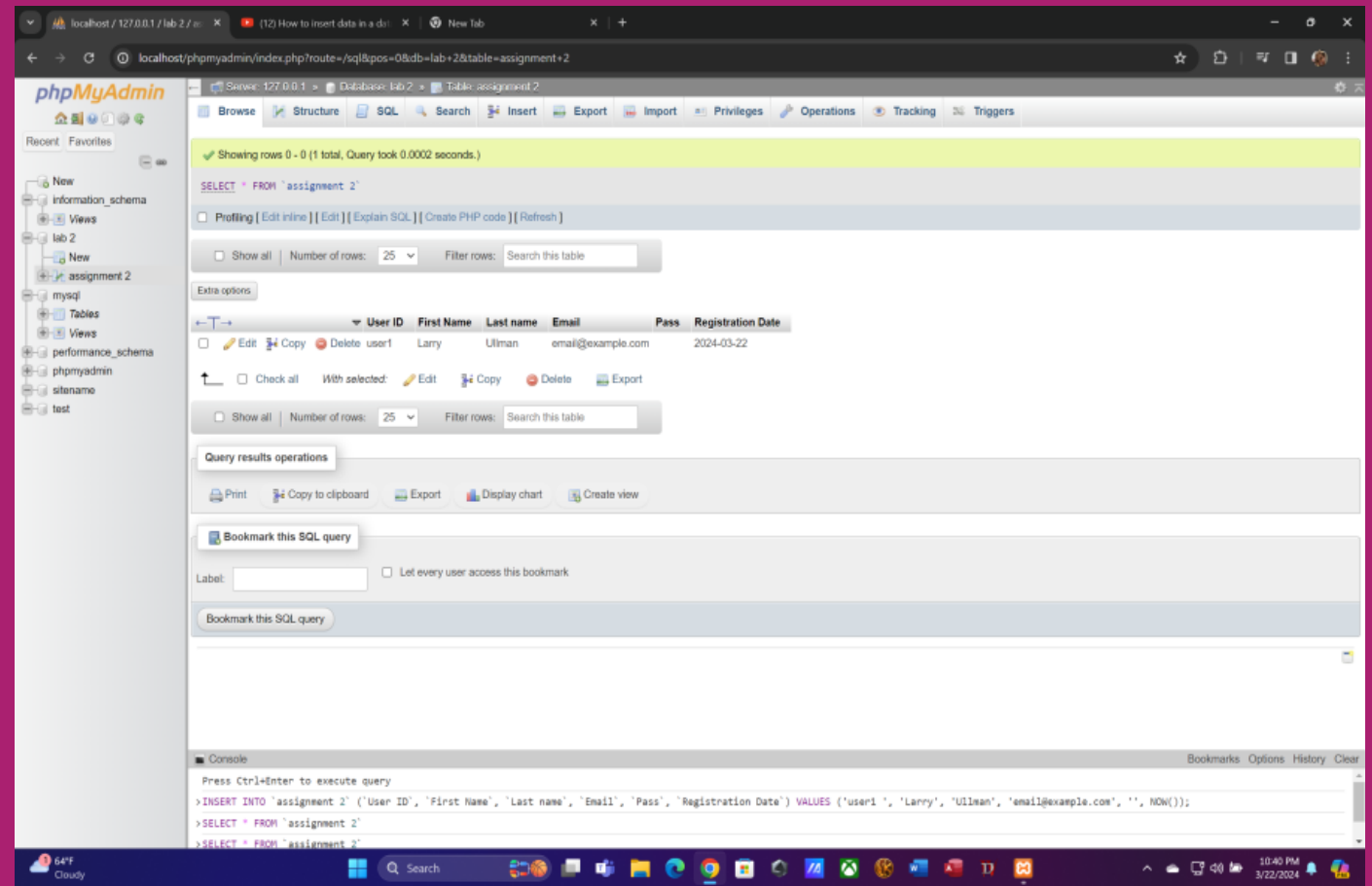
CREATING A DATABASE

The image displays two screenshots of the phpMyAdmin interface, illustrating the process of creating a database table.

Top Screenshot: Shows the 'Table structure' view for a table named 'assignment2'. The table has six columns: User ID, First Name, Last Name, Email, Pass, and Registration Date. The 'Relation view' is selected, and the 'Indexes' section shows 'No index defined'. The 'Partitions' section shows 'No partitioning defined'. The console at the bottom displays the SQL command: `CREATE TABLE `lab2`.`assignment2` (`User ID` INT NOT NULL, `First Name` INT NOT NULL, `Last Name` INT NOT NULL, `Email` INT NOT NULL, `Pass` INT NOT NULL, `Registration Date` INT NOT NULL) ENGINE=InnoDB;`

Bottom Screenshot: Shows the 'Structure' view for the same table. The columns are listed with their data types and attributes. The 'Table comments' section is empty. The 'PARTITION DEFINITION' section is also empty. The console at the bottom displays the SQL command: `CREATE DATABASE sidatabase;
CREATE TABLE `lab2`.`Last Name` (`User` INT NOT NULL, `First Name` INT NOT NULL) ENGINE=InnoDB;`

Insert Data into a Table



The screenshot shows the phpMyAdmin interface for a database named 'lab 2'. The table 'assignment 2' is selected, and the current view shows one row of data. The table structure is as follows:

User ID	First Name	Last name	Email	Pass	Registration Date
user1	Larry	Ulman	email@example.com		2024-03-22

The interface also shows the SQL query editor with the following query:

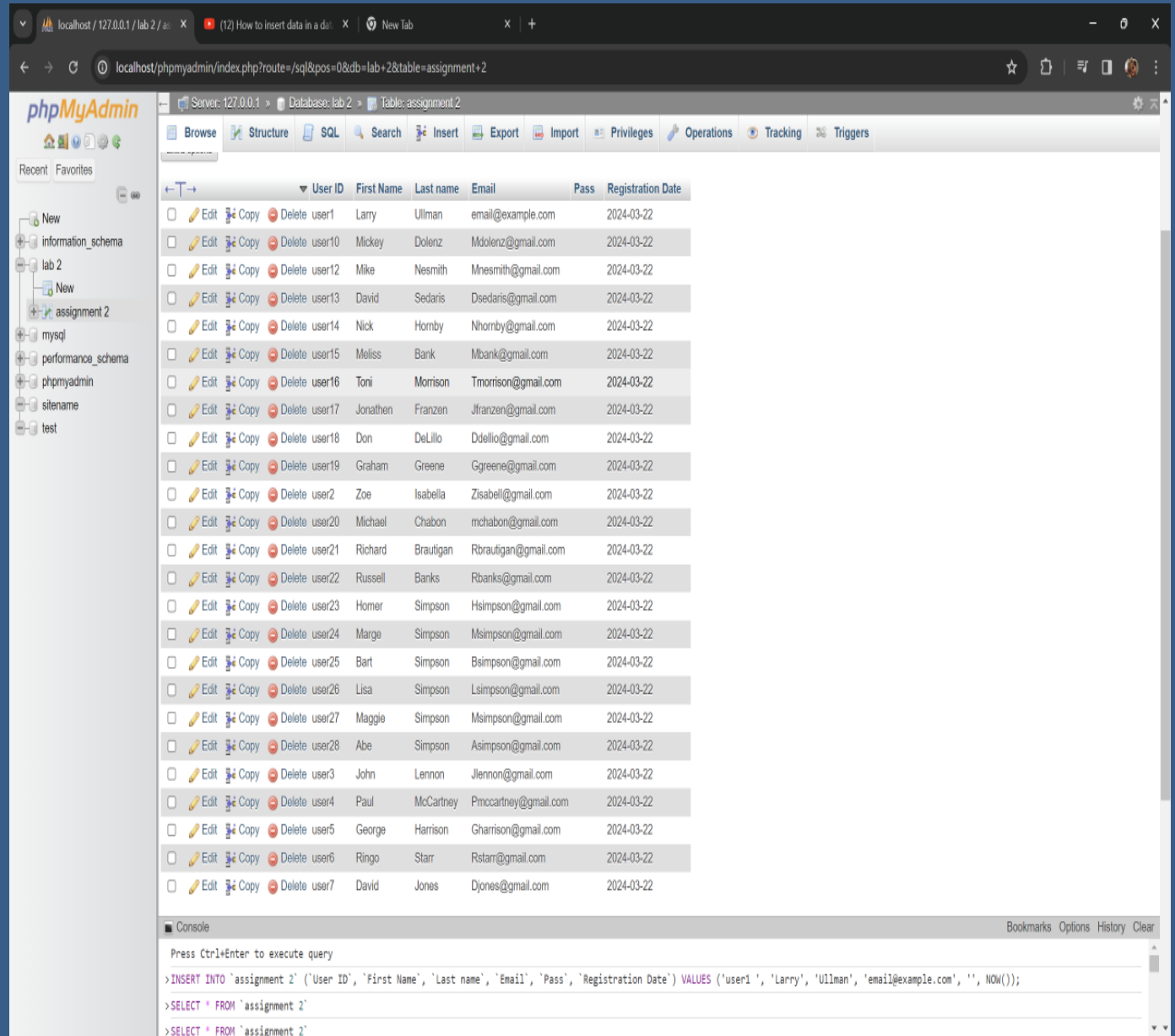
```
SELECT * FROM 'assignment 2'
```

Below the query editor, there are options for 'Query results operations' (Print, Copy to clipboard, Export, Display chart, Create view) and a 'Bookmark this SQL query' section with a label field and a checkbox for 'Let every user access this bookmark'.

The console at the bottom shows the following commands:

```
Press Ctrl+Enter to execute query
> INSERT INTO 'assignment 2' ('User ID', 'First Name', 'Last name', 'Email', 'Pass', 'Registration Date') VALUES ('user1', 'Larry', 'Ulman', 'email@example.com', '', NOW());
> SELECT * FROM 'assignment 2'
```

CREATING/SELECTING DATA



The screenshot shows the phpMyAdmin web interface in a browser. The address bar indicates the URL is localhost/phpmyadmin/index.php?route=/sql&pos=0&db=lab+2&table=assignment+2. The interface displays a table named 'assignment 2' with the following columns: User ID, First Name, Last name, Email, Pass, and Registration Date. The table contains 28 rows of user data. Below the table, the console shows SQL queries for inserting and selecting data.

User ID	First Name	Last name	Email	Pass	Registration Date
user1	Larry	Ullman	email@example.com		2024-03-22
user10	Mickey	Dolenz	Mdolenz@gmail.com		2024-03-22
user12	Mike	Nesmith	Mnesmith@gmail.com		2024-03-22
user13	David	Sedaris	Dsedaris@gmail.com		2024-03-22
user14	Nick	Hornby	Nhornby@gmail.com		2024-03-22
user15	Meliss	Bank	Mbank@gmail.com		2024-03-22
user16	Toni	Morrison	Tmorrison@gmail.com		2024-03-22
user17	Jonathen	Franzen	Jfranzon@gmail.com		2024-03-22
user18	Don	DeLillo	Ddello@gmail.com		2024-03-22
user19	Graham	Greene	Ggreene@gmail.com		2024-03-22
user2	Zoe	Isabella	Zisabel@gmail.com		2024-03-22
user20	Michael	Chabon	mchabon@gmail.com		2024-03-22
user21	Richard	Brautigan	Rbrautigan@gmail.com		2024-03-22
user22	Russell	Banks	Rbanks@gmail.com		2024-03-22
user23	Homer	Simpson	Hsimpson@gmail.com		2024-03-22
user24	Marge	Simpson	Msimpson@gmail.com		2024-03-22
user25	Bart	Simpson	Bsimpson@gmail.com		2024-03-22
user26	Lisa	Simpson	Lsimpson@gmail.com		2024-03-22
user27	Maggie	Simpson	Msimpson@gmail.com		2024-03-22
user28	Abe	Simpson	Asimpson@gmail.com		2024-03-22
user3	John	Lennon	Jlennon@gmail.com		2024-03-22
user4	Paul	McCartney	Pmccartney@gmail.com		2024-03-22
user5	George	Harrison	Gharrison@gmail.com		2024-03-22
user6	Ringo	Starr	Rstarr@gmail.com		2024-03-22
user7	David	Jones	Djones@gmail.com		2024-03-22

```
Press Ctrl+Enter to execute query
>INSERT INTO `assignment 2` (`User ID`,`First Name`,`Last name`,`Email`,`Pass`,`Registration Date`) VALUES ('user1','Larry','Ullman','email@example.com','',NOW());
>SELECT * FROM `assignment 2`
>SELECT * FROM `assignment 2`
```

USING CONDITIONALS

The screenshot shows the phpMyAdmin interface with a table named 'assignment 2' containing 8 rows of user data. The table has columns for User ID, First Name, Last name, Email, Pass, and Registration Date. The data is as follows:

User ID	First Name	Last name	Email	Pass	Registration Date
user23	Homer	Simpson	Hsimpson@gmail.com		2024-03-22
user24	Marge	Simpson	Msimpson@gmail.com		2024-03-22
user25	Bart	Simpson	Bsimpson@gmail.com		2024-03-22
user26	Lisa	Simpson	Lsimpson@gmail.com		2024-03-22
user27	Maggie	Simpson	Msimpson@gmail.com		2024-03-22
user28	Abe	Simpson	Asimpson@gmail.com		2024-03-22

The interface also shows the SQL query used to retrieve the data: `SELECT * FROM `assignment 2``. The console at the bottom shows the query being executed multiple times.

USING LIKE AND NOT LIKE

The screenshot shows the phpMyAdmin interface with a query window open. The query is: `SELECT 'FIRST_NAME', 'LAST_NAME' FROM 'lab 2' WHERE EMAIL NOT LIKE '%@authors.com';` The results table shows 24 rows of user data. The console at the bottom displays the executed query.

FIRST_NAME	LAST_NAME
Larry	Ullman
Mickay	Dolan
Mike	Nesmith
David	Sedaris
Nick	Hornby
Melias	Bank
Toni	Morrison
Jonathan	Franzen
Don	DeLillo
Graham	Greene
Zoe	Isabella
Michael	Chabon
Richard	Brautigan
Russell	Banks
Homer	Simpson
Marge	Simpson
Bart	Simpson
Lisa	Simpson
Maggie	Simpson
Abe	Simpson

The screenshot shows the phpMyAdmin interface with a query window open. The query is: `SELECT 'USER_ID' FROM 'lab 2' WHERE LAST_NAME LIKE 'BANK';` The results table shows 2 rows of user data. The console at the bottom displays the executed query.

USER_ID
user15
user22

SORTING QUERY RESULT

Showing rows 0 - 19 (20 total. Query took 0.0001 seconds.)

```
SELECT * FROM `lab 2` WHERE LAST_NAME = 'Simpson';
```

USER_ID	FIRST_NAME	LAST_NAME	EMAIL	PASS	REGISTRATION DATE
user1	Larry	Ultman	email@example.com		2024-03-22
user10	Mickey	Dolenz	Mickey@gmail.com		2024-03-22
user12	Mike	Nesmith	Mnesmith@gmail.com		2024-03-22
user13	David	Sedars	Dsedars@gmail.com		2024-03-22
user14	Nick	Hornby	Nhornby@gmail.com		2024-03-22
user15	Meliss	Bank	Mbank@gmail.com		2024-03-22
user16	Toni	Morrison	Tmorrison@gmail.com		2024-03-22
user17	Jonathan	Franzen	Jfranzen@gmail.com		2024-03-22
user18	Don	DeLillo	Ddelilo@gmail.com		2024-03-22
user19	Graham	Greene	Ggreene@gmail.com		2024-03-22
user2	Zoe	Isabella	Zisabella@gmail.com		2024-03-22
user20	Michael	Chabon	mchabon@gmail.com		2024-03-22
user21	Richard	Braufgan	Rbraufgan@gmail.com		2024-03-22
user22	Russell	Banks	Rbanks@gmail.com		2024-03-22
user3	John	Lennon	Jlennon@gmail.com		2024-03-22
user4	Paul	McCarthy	Pmccarthy@gmail.com		2024-03-22
user5	George	Harrison	Gharrison@gmail.com		2024-03-22
user6	Ringo	Starr	Rstarr@gmail.com		2024-03-22
user7	David	Jones	Djones@gmail.com		2024-03-22
user9	Peter	Tork	Ptork@gmail.com		2024-03-22

Showing rows 0 - 24 (26 total. Query took 0.0006 seconds.) [LAST_NAME: BANK... - TORK...][FIRST_NAME: MELISS... - PETER...]

```
SELECT 'FIRST_NAME', 'LAST_NAME' FROM `lab 2` ORDER BY LAST_NAME ASC, FIRST_NAME ASC;
```

FIRST_NAME	LAST_NAME
Meliss	Bank
Russell	Banks
Richard	Braufgan
Michael	Chabon
Don	DeLillo
Mickey	Dolenz
Jonathan	Franzen
Graham	Greene
George	Harrison
Nick	Hornby
Zoe	Isabella
David	Jones
John	Lennon
Paul	McCarthy
Toni	Morrison
Mike	Nesmith
David	Sedaris
Abe	Simpson
Bart	Simpson
Homer	Simpson

LIMITING QUERY RESULTS

The screenshot shows the phpMyAdmin interface with a query executed: `SELECT 'FIRST_NAME', 'LAST_NAME' FROM 'lab 2' ORDER BY 'REGISTRATION DATE' LIMIT 5;`. The results table displays 5 rows of data:

FIRST_NAME	LAST_NAME
Pastor	Tork
Mickey	Dolenz
Mike	Nesmith
David	Sedaris
Nick	Hornby

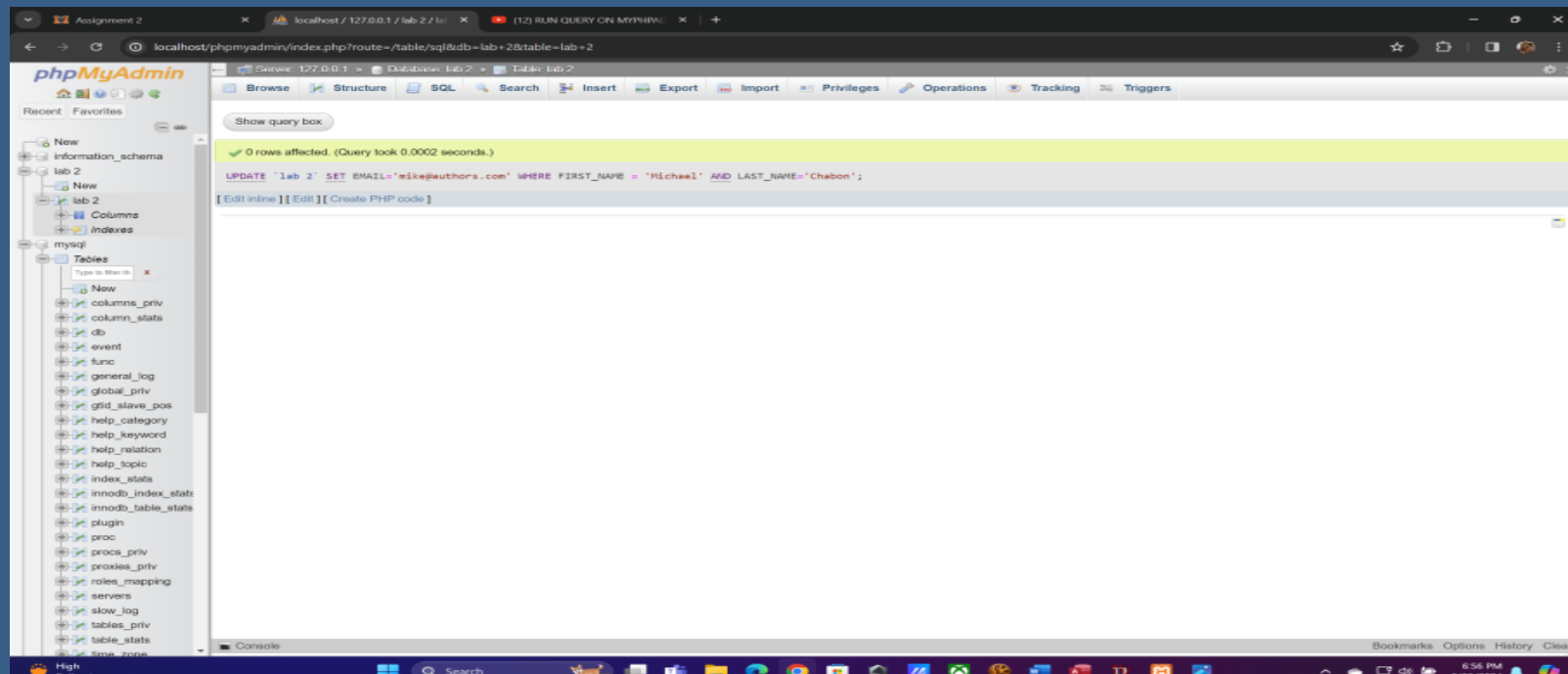
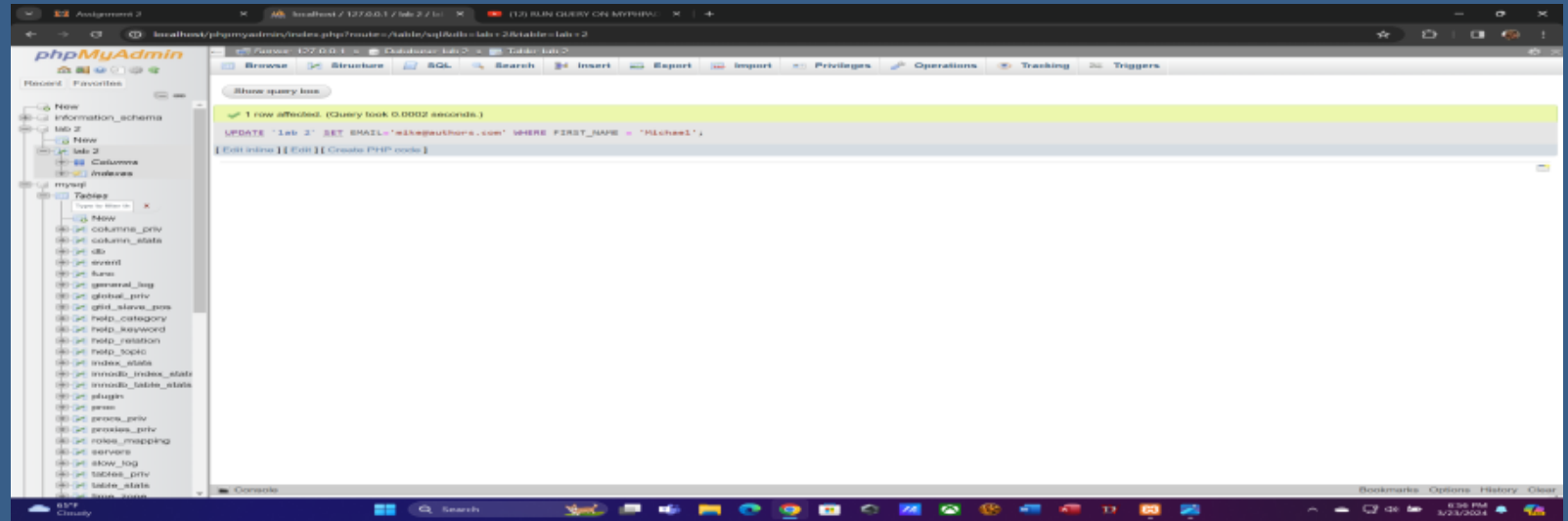
The interface also shows query result operations like Print, Copy to clipboard, Export, Display chart, and Create view, along with a bookmarking section.

The screenshot shows the phpMyAdmin interface with a query executed: `SELECT 'FIRST_NAME', 'LAST_NAME' FROM 'lab 2' ORDER BY 'REGISTRATION DATE' LIMIT 1, 1;`. The results table displays only 1 row of data:

FIRST_NAME	LAST_NAME
Mickey	Dolenz

The interface also shows query result operations like Print, Copy to clipboard, Export, Display chart, and Create view, along with a bookmarking section.

UPDATING DATA



DELETING DATA

The screenshot shows the phpMyAdmin interface with a dialog box titled "localhost says" asking "Do you really want to execute 'DELETE FROM 'lab 2' WHERE USER_ID = 9 LIMIT 1'?" The dialog has "OK" and "Cancel" buttons. In the background, the SQL query editor shows the following query:

```
DELETE FROM 'lab 2' WHERE USER_ID = 9 LIMIT 1
```

Below the query editor, the table structure for 'lab 2' is visible, listing columns: USER_ID, FIRST_NAME, LAST_NAME, EMAIL, PASS, and REGISTRATION_DATE.

The screenshot shows the phpMyAdmin interface displaying the results of the DELETE query. The status bar indicates "0 rows affected (Query took 0.0003 seconds)". Below this, a list of warnings is shown, each with a yellow warning icon and the text "Warning: #1292 Truncated incorrect DECIMAL value: 'user1'". The warnings are listed for user IDs 11 through 22.

USING FUNCTIONS

The screenshot shows the phpMyAdmin interface with a SQL query executed. The query is: `SELECT LENGTH(LAST_NAME) AS L, LAST_NAME FROM 'lab 2' ORDER BY L DESC LIMIT 1;`. The result shows one row with the last name 'Brautigan' and a length of 9.

```
SELECT LENGTH(LAST_NAME) AS L, LAST_NAME FROM 'lab 2' ORDER BY L DESC LIMIT 1;
```

L	NAME
9	Brautigan

The screenshot shows the phpMyAdmin interface with a SQL query executed. The query is: `SELECT CONCAT(LAST_NAME, ' ', FIRST_NAME) FROM 'lab 2';`. The result shows 26 rows of concatenated names.

```
SELECT CONCAT(LAST_NAME, ' ', FIRST_NAME) FROM 'lab 2';
```

CONCAT(LAST_NAME, ' ', FIRST_NAME)
Ulman, Larry
Dolez, Mickey
Nesmith, Mike
Sedaris, David
Hornby, Nick
Bank, Meless
Morrison, Toni
Franses, Jonathan
DwLilo, Dan
Greens, Graham
Isabella, Zoe
Chabon, Michael
Brautigan, Richard
Banks, Russell
Simpson, Homer
Simpson, Marge
Simpson, Bart
Simpson, Lisa
Simpson, Maggie
Simpson, Abe
Lennon, John
McCarthy, Paul
Harrison, George
Star, Ringo
Jones, David

TO USE NUMERIC FUNCTIONS DATE / TIME

The screenshot shows the phpMyAdmin interface with a SQL query: `SELECT DAYNAME('REGISTRATION DATE') AS WEEKDAY FROM 'lab 2' ORDER BY 'REGISTRATION DATE' ASC LIMIT 1;`. The result shows 'Friday' under the 'WEEKDAY' column. The interface includes a 'Show query box' at the top, a 'Query results operations' section with buttons for Print, Copy to clipboard, Export, Display chart, and Create view, and a 'Bookmark this SQL query' section with a label input and a checkbox for 'Let every user access this bookmark'.

The screenshot shows the phpMyAdmin interface with a SQL query: `SELECT DATE('REGISTRATION DATE') AS DATE FROM 'lab 2' ORDER BY 'REGISTRATION DATE' DESC LIMIT 1;`. The result shows '2024-03-22' under the 'DATE' column. The interface includes a 'Show query box' at the top, a 'Query results operations' section with buttons for Print, Copy to clipboard, Export, Display chart, and Create view, and a 'Bookmark this SQL query' section with a label input and a checkbox for 'Let every user access this bookmark'.

CONTINUED

The screenshot shows the phpMyAdmin interface with a query result table. The query executed is `SELECT CURDATE(), CURTIME();`. The result table has two columns: `CURDATE()` and `CURTIME()`. The first row shows the values `2024-03-23` and `22:09:54`.

CURDATE()	CURTIME()
2024-03-23	22:09:54

The screenshot shows the phpMyAdmin interface with a query result table. The query executed is `SELECT LAST_DAY(CURDATE()) AS Last_Day_of_Month, MONTHNAME(CURDATE()) AS Current_Month;`. The result table has two columns: `Last_Day_of_Month` and `Current_Month`. The first row shows the values `2024-03-31` and `March`.

Last_Day_of_Month	Current_Month
2024-03-31	March

TO FORMAT THE DATE / TIME

The screenshot shows the phpMyAdmin interface with a SQL query editor. The query is: `SELECT DATE_FORMAT(NOW(), '%Y-%m-%d %H:%S:%s') AS Formatted_Date;`. The results table shows a single row with the value: `2024-03-23 22:12:46`.

The screenshot shows the phpMyAdmin interface with a SQL query editor. The query is: `SELECT TIME_FORMAT(NOW(), '%H:%i:%s %p') AS Formatted_Time;`. The results table shows a single row with the value: `10:14:12 PM`.

The screenshot shows the phpMyAdmin interface with a SQL query editor. The query is: `SELECT EMAIL, DATE_FORMAT(REGISTRATION_DATE, '%a %b %e %Y') AS DATE FROM `lab 2` ORDER BY `REGISTRATION_DATE` DESC LIMIT 5;`. The results table shows five rows of data:

EMAIL	DATE
Phark@gmail.com	Fri 8:22 2024
Mosiro@gmail.com	Fri 8:22 2024
Mhesmith@gmail.com	Fri 8:22 2024
Diedara@gmail.com	Fri 8:22 2024
Nhouny@gmail.com	Fri 8:22 2024



CONCLUSION

ALTHOUGH IT WAS MY FIRST TIME WORKING WITH XAMPP AND DATABASE SOFTWARE, I THOROUGHLY ENJOYED IT. TRYING TO UNDERSTAND THE COMMANDS AND GETTING THE QUERY TO ACCEPT MY INPUT WAS THE MOST CHALLENGING.



THANK YOU

David Stroud

Dr. Rolon

INFM332

Pages 131-165

David.Stroud@live.mercer.edu