

1(a)

The image displays two screenshots of the phpMyAdmin web interface, showing the process of creating a table and running a SQL query.

**Top Screenshot: Table Structure**

The browser address bar shows the URL: `localhost:7882/phpmyadmin/tbl_structure.php?db=internet+shopping&table=merchants&token=efa7d5dae125a62bb73e92e91d8e6320`.

The interface shows the 'Table structure' view for the 'merchants' table in the 'internet shopping' database. The table structure is as follows:

#	Name	Type	Collation	Attributes	Null	Default	Extra	Action
1	m_id	int(11)			No	None		Change Drop Primary Unique Index Spatial Fulltext More
2	m_name	varchar(255)			Yes	NULL		Change Drop Primary Unique Index Spatial Fulltext More
3	country_code	int(11)			Yes	NULL		Change Drop Primary Unique Index Spatial Fulltext More

Below the table structure, there are options to 'Check all', 'With selected', 'Browse', 'Change', 'Drop', 'Primary', 'Unique', 'Index', and 'Add to central columns'. There is also a 'Remove from central columns' button.

The 'Information' tab is selected, showing the following details:

Space usage		Row statistics	
Data	16 KIB	Format	Compact
Index	0 B	Collation	latin1_swedish_ci
Total	16 KIB	Creation	Sep 21, 2023 at 09:08 AM

**Bottom Screenshot: SQL Query Execution**

The browser address bar shows the URL: `localhost:7882/phpmyadmin/db_sql.php?db=Internet+Shopping&token=efa7d5dae125a62bb73e92e91d8e6320`.

The interface shows the 'SQL' view for the 'Internet Shopping' database. The 'Run SQL query/queries on database Internet Shopping:' section is active, displaying the following SQL query:

```
1 CREATE TABLE merchants (  
2   m_id INT PRIMARY KEY,  
3   m_name VARCHAR(255),  
4   country_code INT  
5 );  
6  
7 |
```

Below the query, there are buttons for 'Clear', 'Format', and 'Get auto-saved query'. There is also a checkbox for 'Bind parameters' and a text input for 'Bookmark this SQL query:'. At the bottom, there are checkboxes for 'Show this query here again', 'Retain query box', 'Rollback when finished', and 'Enable foreign key checks', along with a 'Go' button.

Google Account (no subject) - 21: Lab Test (Group New Tab localhost:7882 / localhost:7882 / localhost:7882 / +

localhost:7882/phpmyadmin/tbl\_sql.php?db=internet+shopping&table=merchants&token=efa7d5dae125a62bb73e92e91d8e6320

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Server: 127.0.0.1 Database: internet shopping Table: merchants

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

Run SQL query/queries on table internet shopping.merchants:

```
1 CREATE TABLE products (  
2   p_id VARCHAR PRIMARY KEY,  
3   m_id INT,  
4   p_name VARCHAR(255),  
5   p_price INT,  
6   FOREIGN KEY (m_id) REFERENCES merchants(m_id)  
7 );
```

Columns: m\_id, m\_name, country\_code

SELECT \* SELECT INSERT UPDATE DELETE Clear Format

Get auto-saved query

☐ Bind parameters

Bookmark this SQL query:

[ Delimiter: ] ☒ Show this query here again ☐ Retain query box ☐ Rollback when finished ☒ Enable foreign key checks Go

Console

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Server: 127.0.0.1 Database: internet shopping Table: merchants

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

Run SQL query/queries on table internet shopping.merchants:

```
1 CREATE TABLE orders (  
2   o_id INT PRIMARY KEY,  
3   status VARCHAR(255)  
4 );
```

Columns: m\_id, m\_name, country\_code

SELECT \* SELECT INSERT UPDATE DELETE Clear Format Get auto-saved query

☐ Bind parameters

Bookmark this SQL query:

[ Delimiter: ] ☒ Show this query here again ☐ Retain query box ☐ Rollback when finished ☒ Enable foreign key checks Go

Console

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Server: 127.0.0.1 Database: internet shopping Table: orders

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

Table structure Relation view

#	Name	Type	Collation	Attributes	Null	Default	Extra	Action
1	O_id	int(11)			No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values Add to central columns
2	status	varchar(255)			Yes	NULL		Change Drop Primary Unique Index Spatial Fulltext Distinct values Add to central columns

Check all With selected Browse Change Drop Primary Unique Index Add to central columns Remove from central columns

Print view Propose table structure Track table Move columns Improve table structure

Add 1 column(s) after status Go

+ Indexes

Information

Space usage		Row statistics	
Data	16 KIB	Format	Compact
Index	0 B	Collation	latin1_swedish_ci
Total	16 KIB	Creation	Sep 21, 2023 at 09:22 AM

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Server: 127.0.0.1 Database: internet shopping Table: orders

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

Run SQL query/queries on table internet shopping.orders:

```
1 CREATE TABLE order_items (
2   o_id INT,
3   p_id INT,
4   quantity INT,
5   FOREIGN KEY (o_id) REFERENCES orders(o_id),
6   FOREIGN KEY (p_id) REFERENCES products(p_id)
7 );
```

Columns: O\_id, status

SELECT \* SELECT INSERT UPDATE DELETE Clear Format

Get auto-saved query

Bind parameters

Bookmark this SQL query:

[ Delimiter: ] Show this query here again Retain query box Rollback when finished Enable foreign key checks Go

Error

SQL query:

Google Account (no subject) - 212 Lab Test (Group E) New Tab localhost:7882 / localhost:7882 / localhost:7882 / +

localhost:7882/phpmyadmin/tbl\_structure.php?db=internet+shopping&table=order\_items&token=efa7d5dae125a62bb73e92e91d8e6320

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Server: 127.0.0.1 Database: internet shopping Table: order\_items

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

Table structure Relation view

#	Name	Type	Collation	Attributes	Null	Default	Extra	Action
1	o_id	int(11)			Yes	NULL		Change Drop Primary Unique Index Spatial Fulltext Distinct values Add to central columns
2	p_id	int(11)			Yes	NULL		Change Drop Primary Unique Index Spatial Fulltext Distinct values Add to central columns
3	quantity	int(11)			Yes	NULL		Change Drop Primary Unique Index Spatial Fulltext Distinct values Add to central columns

Check all With selected: Browse Change Drop Primary Unique Index Add to central columns Remove from central columns

Print view Propose table structure Track table Move columns Improve table structure

Add 1 column(s) after quantity Go

+ Indexes

Information

Space usage		Row statistics	
Data	16 KIB	Format	Compact
Index	32 KIB	Collation	latin1_swedish_ci
Total	48 KIB	Creation	Sep 21, 2023 at 09:26 AM

Console

9:27 AM 9/21/2023

(b)

Google Account (no subject) - 212 Lab Test (Group E) New Tab localhost:7882 / localhost:7882 / localhost:7882 / +

localhost:7882/phpmyadmin/tbl\_sql.php?db=internet+shopping&table=order\_items&token=efa7d5dae125a62bb73e92e91d8e6320

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Server: 127.0.0.1 Database: internet shopping Table: order\_items

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

Run SQL query/queries on table internet shopping.order\_items:

```
1 -- Insert data into merchants table
2 INSERT INTO merchants (m_id, m_name, country_code) VALUES
3 (1, 'Merchant A', 101),
4 (2, 'Merchant B', 102),
5 (3, 'Merchant C', 101);
```

Columns: o\_id, p\_id, quantity

SELECT \* SELECT INSERT UPDATE DELETE Clear Format

Get auto-saved query

Bind parameters

Bookmark this SQL query:

[ Delimiter: ] Show this query here again Retain query box Rollback when finished Enable foreign key checks Go

Error

SQL query:

Console: Insert data into merchants table

9:32 AM 9/21/2023

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localhost:7882/phpmyadmin/sql.php?server=1&db=internet+shopping&table=merchants&pos=0&token=efa7d5dae125a62bb73e92e91d8e6320

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Server: 127.0.0.1 Database: internet shopping Table: merchants

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

+ Options

	m_id	m_name	country_code
<input type="checkbox"/>	1	Merchant A	101
<input type="checkbox"/>	2	Merchant B	102
<input type="checkbox"/>	3	Merchant C	101

☐ Check all With selected: ☐ Edit ☐ Copy ☐ Delete ☐ Export

☐ Show all Number of rows: 25 Filter rows: Search this table

Query results operations

☐ Print view ☐ Export ☐ Display chart ☐ Create view

Bookmark this SQL query

Label:  ☐ Let every user access this bookmark

Bookmark this SQL query

Console

9:32 AM 9/21/2023

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Server: 127.0.0.1 Database: internet shopping Table: merchants

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

Run SQL query/queries on table internet shopping.merchants:

```
1 -- Insert data into orders table
2 INSERT INTO orders (o_id, status) VALUES
3 (101, 'Delivered'),
4 (102, 'In Progress'),
5 (103, 'Delivered');
6
```

Columns

m_id
m_name
country_code

SELECT \* SELECT INSERT UPDATE DELETE Clear Format

Get auto-saved query

☐ Bind parameters

Bookmark this SQL query:

[ Delimiter: ] ☒ Show this query here again ☐ Retain query box ☐ Rollback when finished ☒ Enable foreign key checks Go

Console

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localhost:7882/phpmyadmin/sql.php?server=1&db=internet+shopping&table=orders&pos=0&token=efa7d5dae125a62bb73e92e91d8e6320

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Server: 127.0.0.1 Database: internet shopping Table: orders

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

Sort by key: None

+ Options

	O_Id	status
<input type="checkbox"/>	101	Delivered
<input type="checkbox"/>	102	In Progress
<input type="checkbox"/>	103	Delivered

Check all With selected: Edit Copy Delete Export

Show all Number of rows: 25 Filter rows: Search this table

Query results operations

Print view Export Display chart Create view

Bookmark this SQL query

Label: Let every user access this bookmark

Console

Google Account (no subject) - 21: Lab Test (Group E) New Tab localhost:7882 / localhost:7882 / localhost:7882 / +

localhost:7882/phpmyadmin/tbl\_sql.php?db=internet+shopping&table=orders&token=efa7d5dae125a62bb73e92e91d8e6320

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- test

Server: 127.0.0.1 Database: internet shopping Table: orders

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

Run SQL query/queries on table internet shopping.orders:

```
-- Insert data into order_items table
INSERT INTO order_items (o_id, p_id, quantity) VALUES
(101, 1, 2),
(101, 2, 3),
(102, 3, 1),
(102, 4, 5);
```

Columns

- O\_Id
- status

SELECT \* SELECT INSERT UPDATE DELETE Clear Format

Get auto-saved query

Bind parameters

Bookmark this SQL query:

[ Delimiter: ] Show this query here again Retain query box Rollback when finished Enable foreign key checks Go

Console

Google Account (no subject) - 21: Lab Test (Group E) New Tab localhost:7882 / localhost:7882 / localhost:7882 / +

localhost:7882/phpmyadmin/tbl\_structure.php?db=internet+shopping&table=order\_items&token=efa7d5dae125a62bb73e92e91d8e6320

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Server: 127.0.0.1 Database: internet shopping Table: order\_items

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

Table structure Relation view

#	Name	Type	Collation	Attributes	Null	Default	Extra	Action
1	o_id	int(11)			Yes	NULL		Change Drop Primary Unique Index Spatial Fulltext Distinct values More
2	p_id	int(11)			Yes	NULL		Change Drop Primary Unique Index Spatial Fulltext Distinct values More
3	quantity	int(11)			Yes	NULL		Change Drop Primary Unique Index Spatial Fulltext Distinct values More

☐ Check all With selected: Browse Change Drop Primary Unique Index Add to central columns Remove from central columns

Print view Propose table structure Track table Move columns Improve table structure

Add 1 column(s) after quantity Go

+ Indexes

Information

Space usage		Row statistics	
Data	16 KIB	Format	Compact
Index	32 KIB	Collation	latin1_swedish_ci
Total	48 KIB	Creation	Sep 21, 2023 at 09:26 AM

Console

9:43 AM 9/21/2023

c)

The screenshot shows the phpMyAdmin interface with the 'SQL' tab selected for the 'order\_items' table. A SQL query is entered in the text area: `1 SELECT CONCAT(p_name, ' - ', p_id) AS product_info` and `2 FROM products;`. The 'Columns' list on the right shows 'o\_id', 'p\_id', and 'quantity'. Below the query area, there are buttons for 'SELECT', 'INSERT', 'UPDATE', 'DELETE', 'Clear', and 'Format'. A red error bar at the bottom of the interface displays the message: 'Error'.

The screenshot shows the phpMyAdmin interface with the 'Table structure' tab selected for the 'products' table. The table structure is displayed as follows:

#	Name	Type	Collation	Attributes	Null	Default	Extra	Action
1	p_id	int(11)			No	None		<a href="#">Change</a> <a href="#">Drop</a> <a href="#">Primary</a> <a href="#">Unique</a> <a href="#">Index</a> <a href="#">Spatial</a> <a href="#">Fulltext</a> <a href="#">Distinct values</a> <a href="#">More</a>
2	m_id	int(11)			Yes	NULL		<a href="#">Change</a> <a href="#">Drop</a> <a href="#">Primary</a> <a href="#">Unique</a> <a href="#">Index</a> <a href="#">Spatial</a> <a href="#">Fulltext</a> <a href="#">Distinct values</a> <a href="#">More</a>
3	p_name	varchar(255)			Yes	NULL		<a href="#">Change</a> <a href="#">Drop</a> <a href="#">Primary</a> <a href="#">Unique</a> <a href="#">Index</a> <a href="#">Spatial</a> <a href="#">Fulltext</a> <a href="#">Distinct values</a> <a href="#">More</a>
4	price	int(11)			Yes	NULL		<a href="#">Change</a> <a href="#">Drop</a> <a href="#">Primary</a> <a href="#">Unique</a> <a href="#">Index</a> <a href="#">Spatial</a> <a href="#">Fulltext</a> <a href="#">Distinct values</a> <a href="#">More</a>

Below the table structure, there are options to 'Check all', 'With selected', 'Browse', 'Change', 'Drop', 'Primary', 'Unique', 'Index', and 'Add to central columns'. There is also a 'Remove from central columns' button. The 'Indexes' section is expanded, showing 'Information' with 'Space usage' and 'Row statistics'.

Space usage		Row statistics	
Data	16 KIB	Format	Compact
Index	16 KIB	Collation	latin1_swedish_ci
Total	32 KIB	Creation	Sep 21, 2023 at 09:15 AM

d)



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localhost:7882/phpmyadmin/tbl\_sql.php?db=internet+shopping&table=products&token=efa7d5dae125a62bb73e92e91d8e6320

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Server: 127.0.0.1 Database: internet shopping Table: products

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

Run SQL query/queries on table internet shopping.products:

```
1 SELECT m_name
2 FROM merchants
3 WHERE m_name LIKE 'D%';
4
```

Columns

- p\_id
- m\_id
- p\_name
- price

SELECT \* SELECT INSERT UPDATE DELETE Clear Format

Get auto-saved query

☐ Bind parameters

Bookmark this SQL query:

[ Delimiter: ] ☒ Show this query here again ☐ Retain query box ☐ Rollback when finished ☒ Enable foreign key checks Go

Console

Google Account (no subject) - 21: Lab Test (Group New Tab localhost:7882 / localhost:7882 / localhost:7882 / +

localhost:7882/phpmyadmin/tbl\_structure.php?db=internet+shopping&table=merchants&token=efa7d5dae125a62bb73e92e91d8e6320

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Server: 127.0.0.1 Database: internet shopping Table: merchants

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

Table structure Relation view

#	Name	Type	Collation	Attributes	Null	Default	Extra	Action
1	m_id	int(11)			No	None		Change Drop Primary Unique Index Spatial Fulltext More
2	m_name	varchar(255)			Yes	NULL		Change Drop Primary Unique Index Spatial Fulltext More
3	country_code	int(11)			Yes	NULL		Change Drop Primary Unique Index Spatial Fulltext More

Check all With selected: Browse Change Drop Primary Unique Index Add to central columns Remove from central columns

Print view Propose table structure Track table Move columns Improve table structure

Add 1 column(s) after country\_code Go

+ Indexes

Information

Space usage		Row statistics	
Data	16 KIB	Format	Compact
Index	0 B	Collation	latin1_swedish_ci
Total	16 KIB	Creation	Sep 21, 2023 at 09:08 AM

Console

e)F

The screenshot shows the phpMyAdmin interface for the 'internet shopping' database. The 'Table: merchants' is selected. The SQL query entered is:

```
1 SELECT *
2 FROM products
3 ORDER BY price DESC;
```

The 'Columns' list on the right shows: m\_id, m\_name, country\_code. The 'Run SQL query/queries on table internet shopping.merchants:' button is visible. Below the query box, there are buttons for SELECT, INSERT, UPDATE, DELETE, Clear, and Format. The 'Get auto-saved query' button is also present. The 'Bookmark this SQL query:' field is empty. The 'Delimit' dropdown is set to ' '. The 'Show this query here again' checkbox is checked. The 'Retain query box' checkbox is unchecked. The 'Rollback when finished' checkbox is unchecked. The 'Enable foreign key checks' checkbox is checked. The 'Go' button is visible. A red error bar at the bottom of the interface displays the message: 'Error'.

F)

The screenshot shows the phpMyAdmin interface for the 'internet shopping' database. The 'Table: merchants' is selected. The SQL query entered is:

```
1 SELECT p_name, LENGTH(p_name) AS p_name_length
2 FROM products;
```

The 'Columns' list on the right shows: m\_id, m\_name, country\_code. The 'Run SQL query/queries on table internet shopping.merchants:' button is visible. Below the query box, there are buttons for SELECT, INSERT, UPDATE, DELETE, Clear, and Format. The 'Get auto-saved query' button is also present. The 'Bookmark this SQL query:' field is empty. The 'Delimit' dropdown is set to ' '. The 'Show this query here again' checkbox is checked. The 'Retain query box' checkbox is unchecked. The 'Rollback when finished' checkbox is unchecked. The 'Enable foreign key checks' checkbox is checked. The 'Go' button is visible. A red error bar at the bottom of the interface displays the message: 'Error'.

g)

h)

The screenshot shows the phpMyAdmin interface for the 'internet shopping' database. The 'merchants' table is selected. The SQL query entered is:

```
1 SELECT p.name AS p_name, m.m_name
2 FROM products p
3 JOIN merchants m ON p.m_id = m.Id;
4
```

The 'Columns' list on the right shows: m\_id, m\_name, country\_code. The 'Error' message at the bottom is red and indicates a syntax error. The console shows the error details.

i)

The screenshot shows the phpMyAdmin interface for the 'internet shopping' database. The 'merchants' table is selected. The SQL query entered is:

```
1 SELECT p_id
2 FROM c_items
3 WHERE d_id IN (SELECT Id FROM orders WHERE status = 'NOT Delivered');
4
5
```

The 'Columns' list on the right shows: m\_id, m\_name, country\_code. The 'Error' message at the bottom is red and indicates a syntax error. The console shows the error details.