

Week – 7

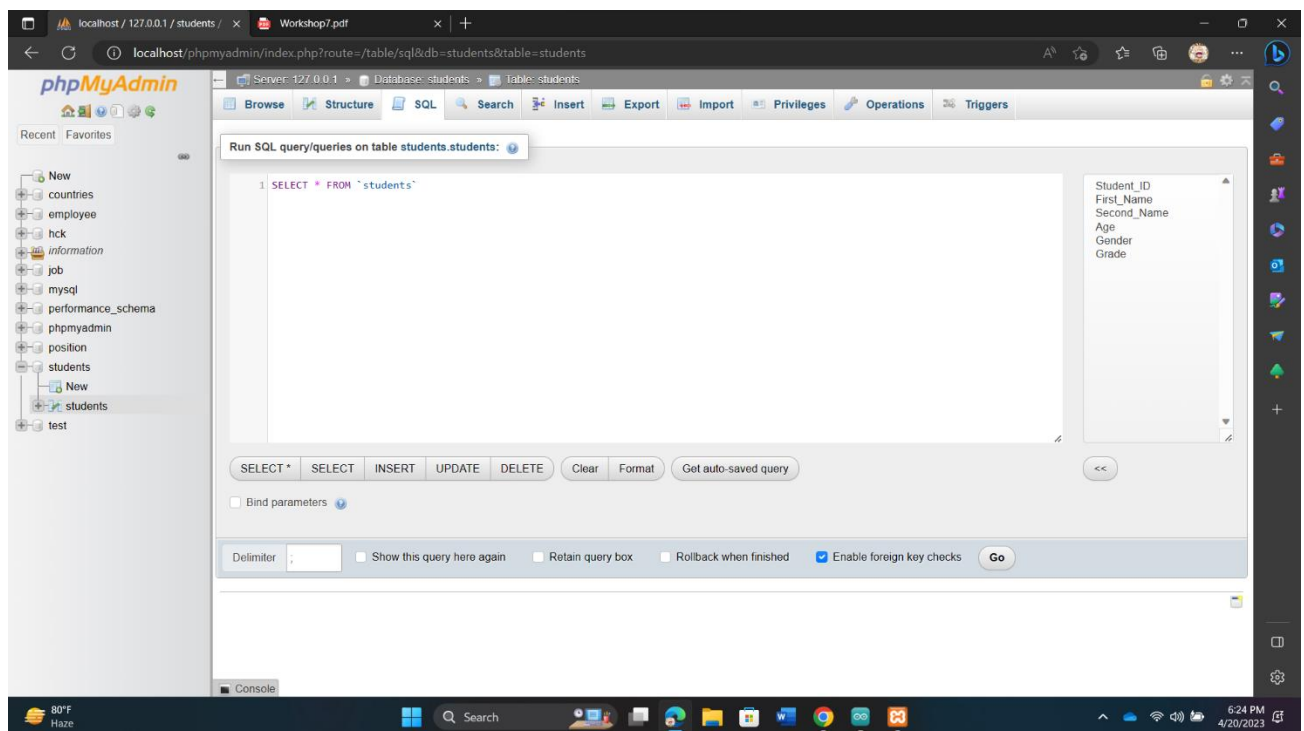
Hands on Lab Questions

1. Table: Students

Student_ID	Firstname	Lastname	Age	Gender	Grade
1	Rakesh	Shrestha	19	Male	A
2	Binita	Bhandari	21	Female	B
3	Bobby	Sherpa	20	Male	C
4	Sagar	Parajuli	22	Male	A
5	Prajina	KC	21	Female	B

Queries:

- Retrieve all data from the Students Table



localhost / 127.0.0.1 / students / x Workshop7.pdf

localhost/phpmyadmin/index.php?route=/table/sql&db=students&table=students

Server: 127.0.0.1 Database: students Table: students

Browse Structure SQL Search Insert Export Import Privileges Operations Triggers

Show query box

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 4 (5 total, Query took 0.0002 seconds)

```
SELECT * FROM `students`;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

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

Extra options

Student_ID	First_Name	Second_Name	Age	Gender	Grade
1	Rakesh	Shrestha	19	Male	A
2	Binita	Bhandari	21	Female	B
3	Bobby	Sherpa	20	Male	C
4	Sagar	Parajuli	22	Male	A
5	Prajina	KC	21	Female	B

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

Query results operations

Print Copy to clipboard Export Display chart Create view

Console

80°F Haze 6:25 PM 4/20/2023

b. Retrieve first name and last name of all students

localhost / 127.0.0.1 / students / x Workshop7.pdf

localhost/phpmyadmin/index.php?route=/table/sql&db=students&table=students

Server: 127.0.0.1 Database: students Table: students

Browse Structure SQL Search Insert Export Import Privileges Operations Triggers

Run SQL query/queries on table students.students:

```
1 SELECT First_Name, Second_Name FROM students;
```

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

Bind parameters

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

Hide query box

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 4 (5 total, Query took 0.0008 seconds)

Console

80°F Haze 6:29 PM 4/20/2023

The screenshot shows the phpMyAdmin interface for the 'students' table. The left sidebar displays a database structure tree with 'students' selected. The main panel shows the 'Table: students' view. A message at the top states: 'Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.' Below this, a green bar indicates 'Showing rows 0 - 4 (5 total, Query took 0.0008 seconds)'. The SQL query entered is `SELECT First_Name, Second_Name FROM students;`. Below the query, a table displays the results:

First_Name	Second_Name
Rakesh	Shrestha
Binita	Bhandari
Bobby	Sherpa
Sagar	Parajuli
Prajina	KC

At the bottom, the 'Query results operations' section includes buttons for Print, Copy to clipboard, Export, Display chart, and Create view.

c. Retrieve only the students who have a grade A

The screenshot shows the phpMyAdmin interface with the SQL query editor open. The left sidebar shows the 'students' table selected. The main panel has a title bar 'Run SQL query/queries on table students.students:' and a text area containing the following SQL query:

```
1 SELECT * FROM `students`
2 WHERE Grade='A';
```

At the bottom of the editor, there are buttons for 'SELECT *', 'SELECT', 'INSERT', 'UPDATE', 'DELETE', 'Clear', 'Format', and 'Get auto-saved query'.

phpMyAdmin

Server: 127.0.0.1 » Database: students » Table: students

Browse Structure SQL Search Insert Export Import Privileges Operations Triggers

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Show query box

⚠ Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

✓ Showing rows 0 - 1 (2 total, Query took 0.0007 seconds)

```
SELECT * FROM `students` WHERE Grade='A';
```

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

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

Extra options

Student_ID	First_Name	Second_Name	Age	Gender	Grade
1	Rakesh	Shrestha	19	Male	A
4	Sagar	Parajuli	22	Male	A

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

Query results operations

Print Copy to clipboard Export Display chart Create view

d. Retrieve only the students who are older than 20

phpMyAdmin

Server: 127.0.0.1 » Database: students » Table: students

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Run SQL query/queries on table students.students:

```
1 SELECT * FROM `students`
2 WHERE Age>20;
```

Student_ID
First_Name
Second_Name
Age
Gender
Grade

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

phpMyAdmin

Server: 127.0.0.1 » Database: students » Table: students

Browse Structure SQL Search Insert Export Import Privileges Operations Triggers

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☐ Bind parameters

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

Hide query box

⚠ Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

✓ Showing rows 0 - 0 (1 total, Query took 0.0082 seconds)

```
SELECT * FROM `students` WHERE Age>20;
```

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

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

Extra options

Student_ID	First_Name	Second_Name	Age	Gender	Grade
3	Bobby	Sherpa	20	Male	C

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

Query results operations

Print Copy to clipboard Export Display chart Create view

e. Retrieve the count of male and female students

The screenshot shows the phpMyAdmin interface with the 'students' table selected. The SQL query editor contains the following query:

```
1 SELECT Gender, COUNT(*) as count FROM students
2 GROUP BY Gender;
3
```

The right sidebar shows the table structure with columns: Student_ID, First_Name, Second_Name, Age, Gender, and Grade.

The screenshot shows the results of the query. A message indicates that the current selection does not contain a unique column, so grid edit, checkbox, Edit, Copy, and Delete features are not available. The results show 2 rows:

Gender	count
Female	2
Male	3

Below the results, there are options for 'Query results operations' including Print, Copy to clipboard, Export, Display chart, and Create view.

f. Update the grade of a specific student (e.g. StudentID=3)

The screenshot shows the phpMyAdmin interface with the 'students' table selected. The SQL query editor contains the following query:

```
1 UPDATE students SET Grade='A' WHERE Student_ID=3;
```

The right sidebar shows the table structure with columns: Student_ID, First_Name, Second_Name, Age, Gender, and Grade.

phpMyAdmin - Server: 127.0.0.1 - Database: students - Table: students

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Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 4 (5 total, Query took 0.0003 seconds)

SELECT * FROM `students`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

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

Extra options

Student_ID	First_Name	Second_Name	Age	Gender	Grade
1	Rakesh	Shrestha	19	Male	A
2	Binita	Bhandari	21	Female	B
3	Bobby	Sherpa	20	Male	A
4	Sagar	Parajuli	22	Male	A
5	Prajina	KC	21	Female	B

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

Query results operations

Print | Copy to clipboard | Export | Display chart | Create view

g. Increment the age of all male students by 1

phpMyAdmin - Server: 127.0.0.1 - Database: students - Table: students

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Run SQL query/queries on table students.students:

```
1 UPDATE students SET Age=Age+1 WHERE Gender='Male';
```

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

Bind parameters

Delimiter: ; | Show this query here again | Retain query box | Rollback when finished | Enable foreign key checks | Simulate query | Go

Student_ID
First_Name
Second_Name
Age
Gender
Grade

phpMyAdmin - Server: 127.0.0.1 - Database: students - Table: students

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- phpmyadmin
- position
- students
- New
- students
- test

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 4 (5 total, Query took 0.0003 seconds)

SELECT * FROM `students`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

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

Extra options

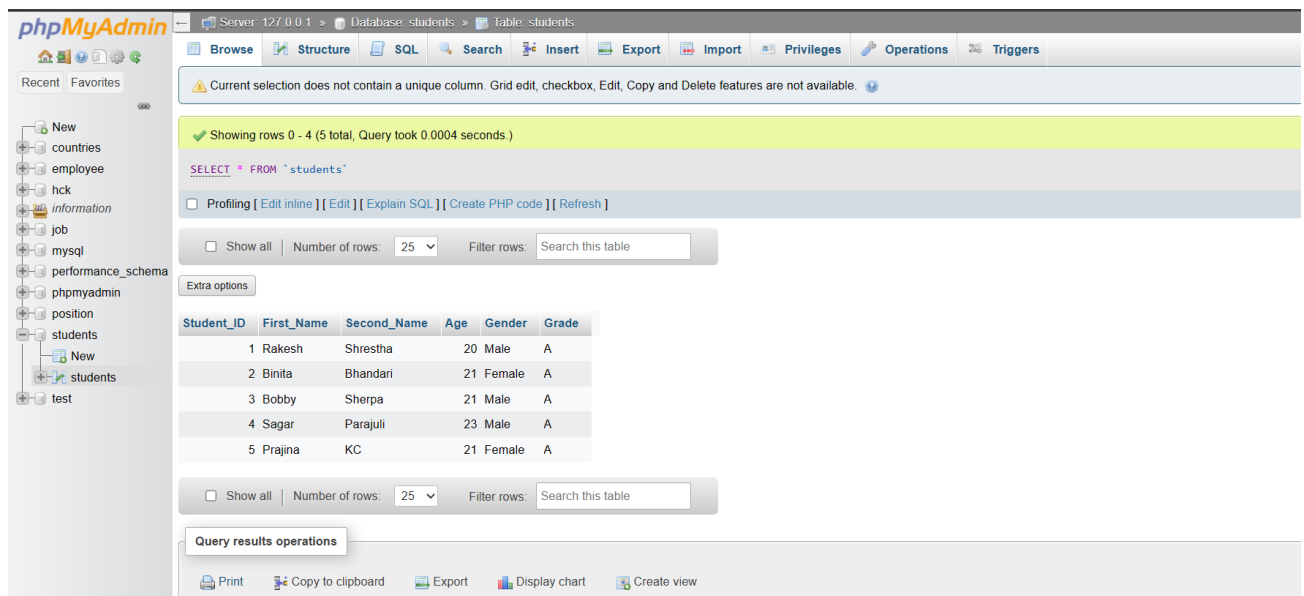
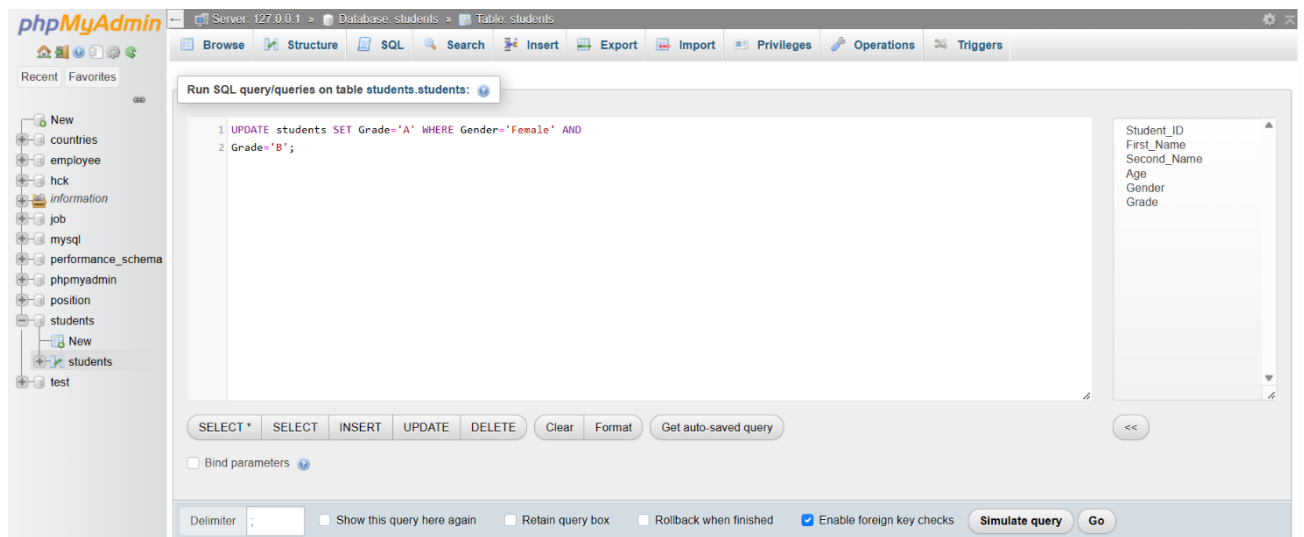
Student_ID	First_Name	Second_Name	Age	Gender	Grade
1	Rakesh	Shrestha	20	Male	A
2	Binita	Bhandari	21	Female	B
3	Bobby	Sherpa	21	Male	A
4	Sagar	Parajuli	23	Male	A
5	Prajina	KC	21	Female	B

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

Query results operations

Print | Copy to clipboard | Export | Display chart | Create view

h. Update the grade of all female students who have a grade of 'B' to 'A'



2. Table: Customers

Customer_ID	Firstname	Lastname	Age	Gender	Email
1	Kabir	Sharma	25	Male	kabir@gmail.com
2	Haris	Shrestha	30	Male	haris@gmail.com
3	Deepti	Singh	26	Female	deepti@gmail.com

Table: Orders

OrderID	CustomerID	OrderDate	Total
1	1	2023-04-06	1000
2	1	2023-04-01	3000
3	2	2023-03-22	3500
4	3	2023-04-04	2300

Table: OrderItem

OrderItemID	OrderID	ProductItems	Quantity	Price
1	1	Product A	2	1200
2	1	Product B	3	1345
3	2	Product C	4	1360
4	3	Product D	5	950
5	3	Product E	1	1125
6	4	Product F	2	1780
7	4	Product G	1	1560
8	3	Product H	3	1220

phpMyAdmin

Server: 127.0.0.1 » Database: customers » Table: customer

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Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 2 (3 total, Query took 0.0003 seconds)

SELECT * FROM `customer`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

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

Extra options

Customer_ID	Firstname	Lastname	Age	Gender	Email
1	Kabir	Sharma	25	Male	kabir@gmail.com
2	Haris	Shrestha	30	Male	haris@gmail.com
3	Deepti	Singh	26	Female	deepti@gmail.com

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

Query results operations

Print Copy to clipboard Export Display chart Create view

phpMyAdmin

Server: 127.0.0.1 » Database: customers » Table: orders

Browse Structure SQL Search Insert Export Import Privileges Operations Triggers

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 3 (4 total, Query took 0.0003 seconds)

SELECT * FROM `orders`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

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

Extra options

OrderID	CustomerID	OrderDate	Total
1	1	2023-04-06	1000
2	1	2023-04-01	3000
3	2	2023-03-22	3500
4	3	2023-04-04	2300

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

Query results operations

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Server: 127.0.0.1 » Database: customers » Table: orderitem

Browse Structure SQL Search Insert Export Import Privileges Operations Triggers

⚠ Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

✓ Showing rows 0 - 7 (8 total, Query took 0.0002 seconds.)

`SELECT * FROM `orderitem``

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

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

Extra options

OrderitemID	OrderID	ProductItem	Quantity	Price
1	1	Product A	2	1200
2	1	Product B	3	1345
3	2	Product C	4	1360
4	3	Product D	5	950
5	3	Product E	1	1125
6	4	Product F	2	1780
7	4	Product G	1	1560
8	3	Product H	3	1220

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

Queries:

a. Retrieve all orders along with the customer details

phpMyAdmin

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- position
- students
- test

Server: 127.0.0.1 » Database: customers » Table: customer

Browse Structure SQL Search Insert Export Import Privileges Operations Triggers

Show query box

⚠ Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

✓ Showing rows 0 - 3 (4 total, Query took 0.0004 seconds.)

`SELECT orders.OrderID, customer.Firstname, orders.OrderDate, orders.Total FROM orders INNER JOIN customer ON orders.CustomerID = customer.Customer_ID;`

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

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

Extra options

OrderID	Firstname	OrderDate	Total
1	Kabir	2023-04-06	1000
2	Kabir	2023-04-01	3000
3	Haris	2023-03-22	3500
4	Deepti	2023-04-04	2300

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

Query results operations

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b. Retrieve all orders along with the customer details and order items

✓ Showing rows 0 - 9 (10 total, Query took 0.0004 seconds.)

`SELECT orders.OrderID, orders.CustomerID,orderItems.OrderItemID, customers.FirstName, customers.LastName, orders.OrderDate,orders.Total, orderItems.ProductItems, orderItems.Quantity, orderItems.Price FROM orders INNER JOIN customers ON customers.Customer_ID = orders.Customer_ID INNER JOIN orderItems ON orderItems.OrderID = orders.OrderID;`

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

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

Extra options

OrderID	CustomerID	OrderItemID	FirstName	LastName	OrderDate	Total	ProductItems	Quantity	Price
1	1	1	Kabir	Sharma	2023-04-06	1000	Product A	2	1200
1	1	2	Kabir	Sharma	2023-04-06	1000	Product B	3	1345
3	2	3	Haris	Shrestha	2023-03-22	3500	Product C	4	1360
3	2	3	Deepti	Singh	2023-03-22	3500	Product C	4	1360
3	2	4	Haris	Shrestha	2023-03-22	3500	Product D	5	950
3	2	4	Deepti	Singh	2023-03-22	3500	Product D	5	950
3	2	5	Haris	Shrestha	2023-03-22	3500	Product E	1	1125
3	2	5	Deepti	Singh	2023-03-22	3500	Product E	1	1125
3	2	8	Haris	Shrestha	2023-03-22	3500	Product H	3	1220
3	2	8	Deepti	Singh	2023-03-22	3500	Product H	3	1220

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

c. Retrieve the customer details for a specific order (e.g. OrderID=2)

Showing rows 0 - 0 (1 total, Query took 0.0003 seconds.)

```
SELECT * FROM customers INNER JOIN orders ON customers.Customer_ID = orders.CustomerID WHERE orders.OrderID = 2;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

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

Extra options

Customer_ID	FirstName	LastName	Age	Gender	Email	OrderID	CustomerID	OrderDate	Total
1	Kabir	Sharma	25	Male	Kabin@gmail.com	2	1	2023-04-01	3000

d. Retrieve all orders for a specific customer (e.g. CustomerID=1)

Showing rows 0 - 1 (2 total, Query took 0.0003 seconds.)

```
SELECT * FROM customers INNER JOIN orders ON customers.Customer_ID = orders.CustomerID WHERE customers.Customer_ID = 1;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

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

Extra options

Customer_ID	FirstName	LastName	Age	Gender	Email	OrderID	CustomerID	OrderDate	Total
1	Kabir	Sharma	25	Male	Kabin@gmail.com	1	1	2023-04-06	1000
1	Kabir	Sharma	25	Male	Kabin@gmail.com	2	1	2023-04-01	3000

e. Retrieve the total revenue generated by each customer

phpMyAdmin Server: 127.0.0.1 > Database: customers > Table: customer

Browse Structure SQL Search Insert Export Import Privileges Operations Triggers

Recent Favorites

Show query box

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 2 (3 total, Query took 0.0070 seconds.)

```
SELECT customer.Customer_ID, customer.Firstname, customer.Lastname, SUM(orders.Total) as TotalRevenue FROM customer INNER JOIN orders ON customer.Customer_ID = orders.CustomerID GROUP BY customer.Customer_ID, customer.Firstname, customer.Lastname;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

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

Extra options

Customer_ID	Firstname	Lastname	TotalRevenue
1	Kabir	Sharma	4000
2	Haris	Shrestha	3500
3	Deepti	Singh	2300

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

Query results operations

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