

1. Write a SQL query to retrieve names (displayed as "Employee Name") and salary of employees. [Relevant table: Works]

phpMyAdmin

Server: 127.0.0.1 » Database: sit103 » Table: Works

Browse Structure SQL Search Insert Export Import Privileges Operations

Recent Favorites

Show query box

Showing rows 0 - 7 (8 total, Query took 0.0004 seconds.)

```
SELECT EmployeeName AS "Employee Name", Salary FROM Works;
```

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

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

				Employee Name	Salary
<input type="checkbox"/>	Edit	Copy	Delete	Adams	22000
<input type="checkbox"/>	Edit	Copy	Delete	Curry	25000
<input type="checkbox"/>	Edit	Copy	Delete	Hayes	19000
<input type="checkbox"/>	Edit	Copy	Delete	Jones	21000
<input type="checkbox"/>	Edit	Copy	Delete	Lindsay	9000
<input type="checkbox"/>	Edit	Copy	Delete	Smith	22000
<input type="checkbox"/>	Edit	Copy	Delete	Turner	20000
<input type="checkbox"/>	Edit	Copy	Delete	Williams	18000

☐ Check all | With selected: Edit Copy Delete Export

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Query results operations

Console

2. Write a SQL query to list name, street, and city of employees in descending order by their names. [Relevant table: Employee]

phpMyAdmin

Server: 127.0.0.1 » Database: sit103 » Table: employee

Browse Structure SQL Search Insert Export Import Privileges Operations Trac

Show query box

Showing rows 0 - 7 (8 total, Query took 0.0005 seconds.) [employeeName: WILLIAMS... - ADAMS...]

```
SELECT employeeName, street, city FROM employee ORDER BY employeeName DESC;
```

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

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

					employeeName	street	city
<input type="checkbox"/>	Edit	Copy	Delete		Williams	Nassus	Princeton
<input type="checkbox"/>	Edit	Copy	Delete		Turner	Putname	Stamford
<input type="checkbox"/>	Edit	Copy	Delete		Smith	North	Rye
<input type="checkbox"/>	Edit	Copy	Delete		Lindsay	Park	Pittsfield
<input type="checkbox"/>	Edit	Copy	Delete		Jones	Main	Harrison
<input type="checkbox"/>	Edit	Copy	Delete		Hayes	Main	Harrison
<input type="checkbox"/>	Edit	Copy	Delete		Curry	North	Rye
<input type="checkbox"/>	Edit	Copy	Delete		Adams	Spring	Pittsfield

Check all | With selected: Edit Copy Delete Export

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Query results operations

Console

3. Write a SQL query to get a list of unique streets from the Employee table. [Relevant table: Employee]

The screenshot shows the phpMyAdmin interface with the following components:

- Header:** phpMyAdmin logo, navigation icons, and a breadcrumb trail: Server: 127.0.0.1 » Database: sit103 » Table: Employee.
- Navigation Panel (Left):** A tree view showing the database structure. The 'sit103' database is selected, and the 'Employee' table is highlighted under the 'New' folder.
- SQL Tab:** The 'SQL' tab is active, displaying the query: `SELECT DISTINCT Street FROM Employee;`
- Query Execution:** A green status bar indicates 'Showing rows 0 - 5 (6 total, Query took 0.0005 seconds.)'.
- Query Results:** A table with one column, 'Street', is displayed. It contains six rows of unique street names: Spring, North, Main, Park, Putname, and Nassus. Each row has a checkbox, an 'Edit' icon, a 'Copy' icon, and a 'Delete' icon.
- Table Controls:** Below the table, there are checkboxes for 'Check all', 'With selected', and buttons for 'Edit', 'Copy', 'Delete', and 'Export'.
- Query Results Operations:** A section at the bottom with buttons for 'Print', 'Copy to clipboard', 'Export', 'Display chart', and 'Create view'.

4. Write a SQL query to list all records in the works table in descending order of company names and within a company in ascending order by employee name. [Relevant table: Works]

phpMyAdmin

Server: 127.0.0.1 » Database: sit103 » Table: Works

Browse Structure SQL Search Insert Export Import Privileges Operations

Recent Favorites

New  
company10  
New  
product  
information\_schema  
institute  
mysql  
performance\_schema  
phpmyadmin  
sit103  
New  
company  
employee  
manages  
works  
test

Show query box

Showing rows 0 - 7 (8 total, Query took 0.0006 seconds.)

```
SELECT * FROM Works ORDER BY CompanyName DESC, EmployeeName ASC;
```

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

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

				employeeName	companyName	salary
<input type="checkbox"/>	Edit	Copy	Delete	Hayes	Woolworths	19000
<input type="checkbox"/>	Edit	Copy	Delete	Smith	Waltons	22000
<input type="checkbox"/>	Edit	Copy	Delete	Jones	Tweeties	21000
<input type="checkbox"/>	Edit	Copy	Delete	Williams	Tweeties	18000
<input type="checkbox"/>	Edit	Copy	Delete	Adams	Meyer	22000
<input type="checkbox"/>	Edit	Copy	Delete	Curry	Meyer	25000
<input type="checkbox"/>	Edit	Copy	Delete	Lindsay	Meyer	9000
<input type="checkbox"/>	Edit	Copy	Delete	Turner	Firebrand	20000

☐ Check all | With selected: Edit Copy Delete Export

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Query results operations

Console

5. Write a SQL query to list name and salary of all employees who work in Meyer and sort the records in ascending order by their incomes. [Relevant table: Works]

phpMyAdmin

Server: 127.0.0.1 » Database: sit103 » Table: Works

Browse Structure SQL Search Insert Export Import Privileges Operations Trac

Recent Favorites

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New  
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institute  
mysql  
performance\_schema  
phpmyadmin  
sit103  
New  
company  
employee  
manages  
works  
test

Show query box

Showing rows 0 - 2 (3 total, Query took 0.0006 seconds.) [Salary: 9000... - 25000...]

```
SELECT EmployeeName AS "Name", Salary FROM Works WHERE CompanyName = 'Meyer' ORDER BY Salary ASC;
```

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

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

	Name	Salary
<input type="checkbox"/>	Lindsay	9000
<input type="checkbox"/>	Adams	22000
<input type="checkbox"/>	Curry	25000

Check all | With selected: Edit Copy Delete Export

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Query results operations

Print Copy to clipboard Export Display chart Create view

Bookmark this SQL query

Label:  ☐ Let every user access this bookmark

Console

6. Assuming that the salary in the Works table is annual salary, write a SQL query to retrieve names (displayed as “Employee Name”) and monthly salary as “Monthly Salary” of employees. [Relevant table: Works]

phpMyAdmin

Server: 127.0.0.1 » Database: sit103 » Table: Works

Browse Structure SQL Search Insert Export Import Privileges Operations

Recent Favorites

New  
company10  
New  
product  
information\_schema  
institute  
mysql  
performance\_schema  
phpmyadmin  
sit103  
New  
company  
employee  
manages  
works  
test

Show query box

Showing rows 0 - 7 (8 total, Query took 0.0004 seconds.)

```
SELECT EmployeeName AS "Employee Name", Salary / 12 AS "Monthly Salary" FROM Works;
```

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

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

	Employee Name	Monthly Salary
<input type="checkbox"/> Edit Copy Delete	Adams	1833.3333
<input type="checkbox"/> Edit Copy Delete	Curry	2083.3333
<input type="checkbox"/> Edit Copy Delete	Hayes	1583.3333
<input type="checkbox"/> Edit Copy Delete	Jones	1750.0000
<input type="checkbox"/> Edit Copy Delete	Lindsay	750.0000
<input type="checkbox"/> Edit Copy Delete	Smith	1833.3333
<input type="checkbox"/> Edit Copy Delete	Turner	1666.6667
<input type="checkbox"/> Edit Copy Delete	Williams	1500.0000

☐ Check all | With selected: Edit Copy Delete Export

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Query results operations

Console

7. Write a SQL query to list names and salaries of all employees who work in Meyer and earn more than 20000.

[Relevant table: Works]

The screenshot shows the phpMyAdmin interface with the following components:

- Header:** phpMyAdmin logo, navigation icons, and a top menu bar with options: Browse, Structure, SQL, Search, Insert, Export, Import, Privileges, Operations, and Tracking.
- Left Sidebar:** A tree view of the database structure. The 'sit103' database is selected, showing tables: company10, product, information\_schema, institute, mysql, performance\_schema, phpmyadmin, and test.
- SQL Tab:** The 'SQL' tab is active, displaying the query: `SELECT EmployeeName AS "Name", Salary FROM Works WHERE CompanyName = 'Meyer' AND Salary > 20000;`
- Query Results:** A green banner indicates 'Showing rows 0 - 1 (2 total, Query took 0.0006 seconds.)'. Below the query, a table displays the results:

	Name	Salary
<input type="checkbox"/>	Adams	22000
<input type="checkbox"/>	Curry	25000
- Query Results Operations:** A section with buttons for Print, Copy to clipboard, Export, Display chart, and Create view.
- Bookmark this SQL query:** A section with a 'Label' input field and a checkbox 'Let every user access this bookmark'.
- Console:** A tab at the bottom labeled 'Console' with the text 'x this SQL query'.

8. Write a SQL query to list names and companies of the employees who earn in the range of 20000 to 25000 (inclusive). [Relevant table: Works]

phpMyAdmin

Server: 127.0.0.1 » Database: sit103 » Table: Works

Browse Structure SQL Search Insert Export Import Privileges Operations

Show query box

Showing rows 0 - 4 (5 total, Query took 0.0005 seconds.)

```
SELECT EmployeeName AS "Name", CompanyName AS "Company" FROM Works WHERE Salary BETWEEN 20000 AND 25000;
```

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

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

				Name	Company
<input type="checkbox"/>	Edit	Copy	Delete	Adams	Meyer
<input type="checkbox"/>	Edit	Copy	Delete	Curry	Meyer
<input type="checkbox"/>	Edit	Copy	Delete	Jones	Tweeties
<input type="checkbox"/>	Edit	Copy	Delete	Smith	Waltons
<input type="checkbox"/>	Edit	Copy	Delete	Turner	Firebrand

Check all | With selected: Edit Copy Delete Export

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Query results operations

Print Copy to clipboard Export Display chart Create view

Bookmark this SQL query

Console



9. Write a SQL query to list names of employees whose managers have "ll" (double ls) in their names. [Relevant table: Manages]

phpMyAdmin

Server: 127.0.0.1 » Database: sit103 » Table: manages

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking

Recent Favorites

Show query box

Showing rows 0 - 3 (4 total, Query took 0.0006 seconds.)

```
SELECT employeeName FROM manages WHERE managerName LIKE "%ll%";
```

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

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

	employeeName
<input type="checkbox"/> Edit Copy Delete	Curry
<input type="checkbox"/> Edit Copy Delete	Hayes
<input type="checkbox"/> Edit Copy Delete	Jones
<input type="checkbox"/> Edit Copy Delete	Smith

Check all | With selected: Edit Copy Delete Export

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Query results operations

Print Copy to clipboard Export Display chart Create view

Bookmark this SQL query

Console ☐ Let every user access this bookmark

10. Write a SQL query to list company names and the average salary of their employees. [Relevant table: Works]

The screenshot shows the phpMyAdmin interface with the following components:

- Left sidebar:** A tree view of the database structure. The 'sit103' database is selected, showing tables: 'company', 'employee', 'manages', 'works', and 'test'.
- Top navigation bar:** Includes 'Browse', 'Structure', 'SQL' (active), 'Search', 'Insert', 'Export', 'Import', 'Privileges', and 'Operations'.
- Header:** Displays 'Server: 127.0.0.1', 'Database: sit103', and 'Table: Works'.
- Query box:** Contains the SQL query: `SELECT CompanyName AS "Company Name", AVG(Salary) AS "Average Salary" FROM Works GROUP BY CompanyName;`
- Query results:** A table with 5 rows and 2 columns: 'Company Name' and 'Average Salary'. The data is as follows:

Company Name	Average Salary
Firebrand	20000.0000
Meyer	18666.6667
Tweeties	19500.0000
Waltons	22000.0000
Woolworths	19000.0000
- Footer:** Includes a 'Console' tab and a 'Bookmark this SQL query' button.

11. Write a SQL query to list the name of the companies with average salary of employees more than or equal to 20000. [Relevant table: Works]

phpMyAdmin

Server: 127.0.0.1 » Database: sit103 » Table: Works

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking

Recent Favorites

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mysql  
performance\_schema  
phpmyadmin  
sit103  
New  
company  
employee  
manages  
works  
test

Show query box

Showing rows 0 - 1 (2 total, Query took 0.0005 seconds.)

```
SELECT CompanyName FROM Works GROUP BY CompanyName HAVING AVG(Salary) >= 20000;
```

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

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

Company Name

Edit Copy Delete Firebrand

Edit Copy Delete Waltons

Check all | With selected: Edit Copy Delete Export

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Query results operations

Print Copy to clipboard Export Display chart Create view

Bookmark this SQL query

Label:  ☐ Let every user access this bookmark

Console < this SQL query

12. Write a SQL query to select details of the employees who works in companies located in Rye. [Relevant tables: Works and Company; Hint: use a subquery]

The screenshot shows the phpMyAdmin interface for a database named 'sit103'. The 'Works' table is selected. A SQL query is entered in the query box, and the results are displayed in a table. The query is: `SELECT W.EmployeeName, W.Salary, W.CompanyName FROM Works AS W WHERE W.CompanyName IN ( SELECT C.CompanyName FROM Company AS C WHERE C.City = 'Rye' );`

The results table shows 4 rows of data:

	EmployeeName	Salary	CompanyName
<input type="checkbox"/>	Adams	22000	Meyer
<input type="checkbox"/>	Curry	25000	Meyer
<input type="checkbox"/>	Lindsay	9000	Meyer
<input type="checkbox"/>	Smith	22000	Waltons

The interface also includes a sidebar with a database tree, a top navigation bar with various tools, and a bottom section for query results operations and bookmarking.

13. Write a SQL query find the number of rows in the Manages table. [Relevant tables: Manages; Hint: use COUNT()]

The screenshot shows the phpMyAdmin web interface. On the left is a sidebar with a database tree. The main area at the top shows the breadcrumb path: Server: 127.0.0.1 » Database: sit103 » Table: Manages. Below this is a toolbar with buttons for Browse, Structure, SQL, Search, Insert, Export, Import, and Privileges. The SQL tab is active, displaying a query box with the text: `SELECT COUNT(*) AS "Number of Rows" FROM Manages;`. A yellow message box states: "Your SQL query has been executed successfully." Below the query, there are links for Profiling, Edit inline, Edit, Explain SQL, Create PHP code, and Refresh. An "Extra options" button is also present. The query result is displayed as a table with one row: "Number of Rows" with the value 8. Below the result table is a "Query results operations" bar with buttons for Print, Copy to clipboard, Export, Display chart, and Create view. At the bottom of the main area is a "Bookmark this SQL query" section with a label input field, a checkbox for "Let every user access this bookmark", and a "Bookmark this SQL query" button. A "Console" tab is visible at the very bottom.

phpMyAdmin

Recent Favorites

Server: 127.0.0.1 » Database: sit103 » Table: Manages

Browse Structure SQL Search Insert Export Import Privileges

Show query box

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

Your SQL query has been executed successfully.

`SELECT COUNT(*) AS "Number of Rows" FROM Manages;`

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

Extra options

Number of Rows
8

Query results operations

Print Copy to clipboard Export Display chart Create view

Bookmark this SQL query

Label:  ☐ Let every user access this bookmark

Bookmark this SQL query

Console

14. Write a SQL query to find the name and company of the employee earning the highest salary. [Relevant tables: Works; Hint: use a subquery using max() to find the highest salary. Please do not use 'WHERE salary=25000' as it is the highest salary in this case. Hope you can understand that it is not possible if there are millions of records. We want you to learn how to find it with a query.]

The screenshot shows the phpMyAdmin interface for a MySQL database named 'sit103'. The 'Works' table is selected. A SQL query is entered in the query box:

```
SELECT W.EmployeeName AS "Employee Name", W.CompanyName AS "Company" FROM Works AS W WHERE W.Salary = ( SELECT MAX(Salary) FROM Works );
```

The query results show one row with the following data:

Employee Name	Company
Meyer	

The interface includes a sidebar with a tree view of the database structure, a top navigation bar with tabs like 'Browse', 'Structure', 'SQL', 'Search', 'Insert', 'Export', 'Import', 'Privileges', 'Operations', 'Tracking', and 'Tr'. Below the query box, there are options to show all rows, filter rows, and extra options. The 'Query results operations' section includes buttons for 'Print', 'Copy to clipboard', 'Export', 'Display chart', and 'Create view'. At the bottom, there is a 'Bookmark this SQL query' section with a label field and a checkbox to let every user access this bookmark.