

LAB Assignment - 4

1. Create tables Teacher (Id INT PRIMARY KEY, Tname VARCHAR(20)) and Student (id INT PRIMARY KEY, Sname VARCHAR(20));

```
CREATE TABLE Teacher ( Id INT PRIMARY KEY, Tname VARCHAR(20) );CREATE TABLE  
Teacher ( Id INT PRIMARY KEY, Tname VARCHAR(20) );
```

```
CREATE TABLE Student ( Id INT PRIMARY KEY, Sname VARCHAR(20) );
```



2. Insert values like {(“1,”Ram”), (2,”Hari”), (3,”Sita”)} in Teacher and {(“2,”Hari”), (3,”Sita”), (4,”Gita”)} in Student.

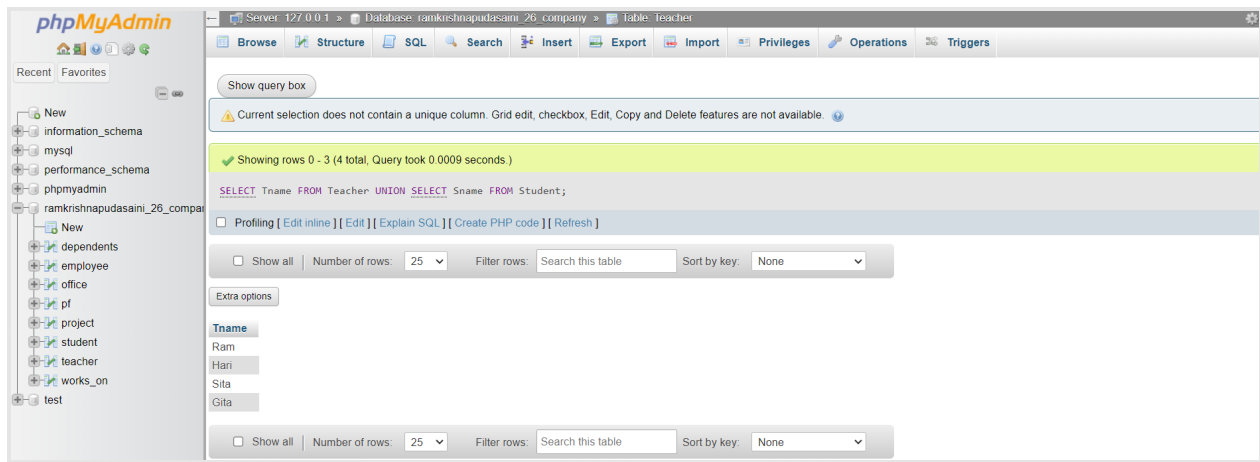
```
INSERT INTO Teacher (Id, Tname) VALUES (1, 'Ram'), (2, 'Hari'), (3, 'Sita');
```

```
INSERT INTO Student (Id, Sname) VALUES (2, 'Hari'), (3, 'Sita'), (4, 'Gita');
```



3. Write query to find names of Union of Teacher and Student.

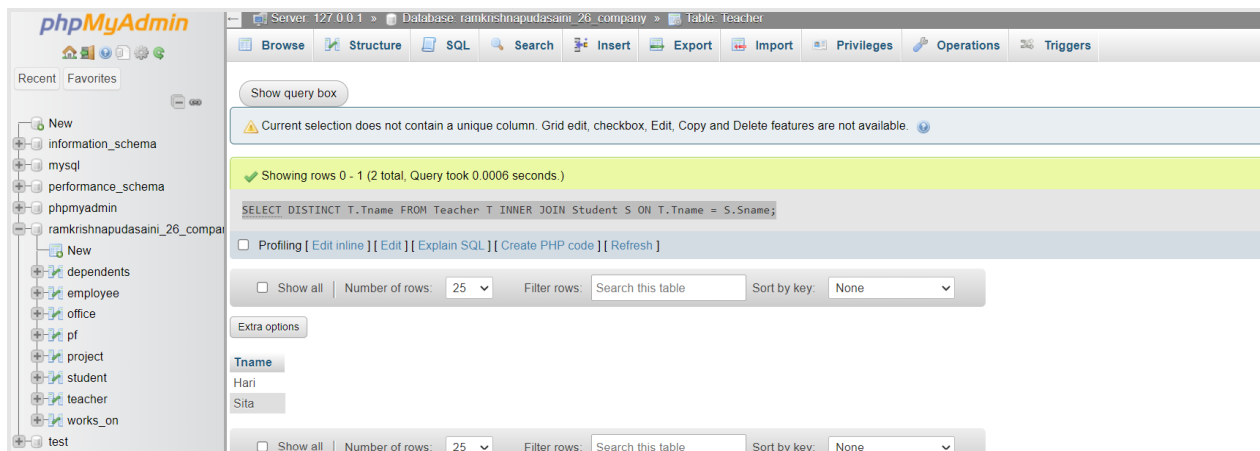
```
SELECT Tname FROM Teacher UNION SELECT Sname FROM Student;
```



The screenshot shows the phpMyAdmin interface with the 'Teacher' table selected. The SQL query editor contains the query: `SELECT Tname FROM Teacher UNION SELECT Sname FROM Student;`. The results pane shows 4 rows: Ram, Hari, Sita, and Gita. The status bar indicates 'Showing rows 0 - 3 (4 total, Query took 0.0009 seconds.)'.

4. Write query to find intersection of names Teacher and Student using Distinct and Inner Join

```
SELECT DISTINCT T.Tname FROM Teacher T INNER JOIN Student S ON T.Tname = S.Sname;
```



The screenshot shows the phpMyAdmin interface with the 'Teacher' table selected. The SQL query editor contains the query: `SELECT DISTINCT T.Tname FROM Teacher T INNER JOIN Student S ON T.Tname = S.Sname;`. The results pane shows 2 rows: Hari and Sita. The status bar indicates 'Showing rows 0 - 1 (2 total, Query took 0.0006 seconds.)'.

5. Write query to find intersection of names Teacher and Student using IN and Sub query

```
SELECT Tname FROM Teacher WHERE Tname IN ( SELECT Sname FROM Student );
```

The screenshot shows the phpMyAdmin interface. On the left, the database structure is visible, including the 'ramkrishnapudasaini_26_company' database. The main panel displays the 'Table: Teacher' view. A query box at the top contains the SQL query: `SELECT Tname FROM Teacher WHERE Tname IN (SELECT Sname FROM Student);`. Below the query box, a message indicates 'Showing rows 0 - 1 (2 total, Query took 0.0009 seconds)'. The results table shows two rows: 'Hari' and 'Sita'.

6. Write query to find Teacher MINUS Student using Left Join

```
SELECT T.Tname FROM Teacher T LEFT JOIN Student S ON T.Tname = S.Sname WHERE S.Sname IS NULL;
```

The screenshot shows the phpMyAdmin interface. The main panel displays the 'Table: Teacher' view. A query box at the top contains the SQL query: `SELECT T.Tname FROM Teacher T LEFT JOIN Student S ON T.Tname = S.Sname WHERE S.Sname IS NULL;`. Below the query box, a message indicates 'Showing rows 0 - 0 (1 total, Query took 0.0007 seconds)'. The results table shows one row: 'Ram'.

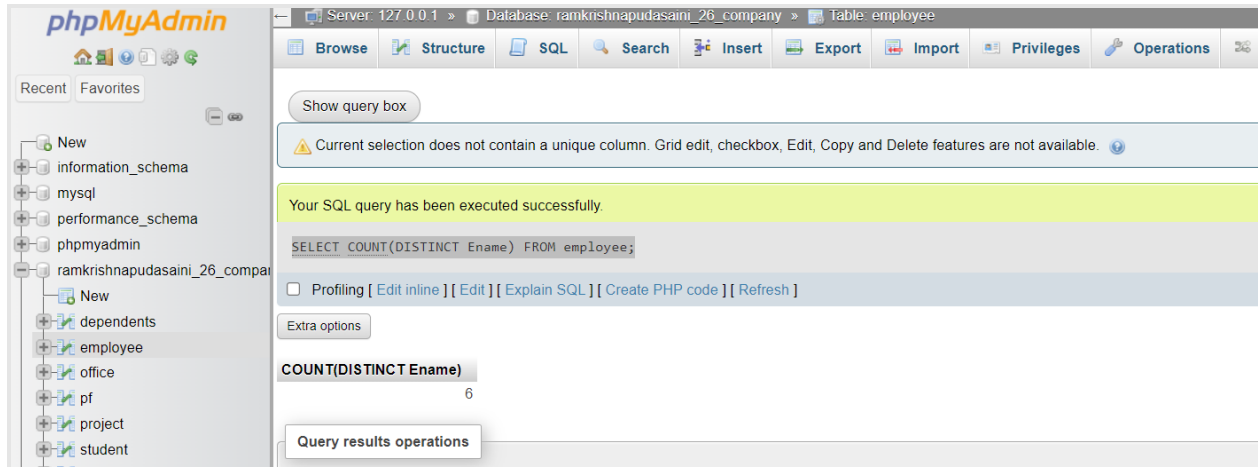
7. Find the number of offices in the Office table from the COMPANY Database in Lab-1 using COUNT function.

```
SELECT COUNT(*) FROM ramkrishnapudasaini_26_company.Office;
```

The screenshot shows the phpMyAdmin interface. The main panel displays the 'Table: Office' view. A query box at the top contains the SQL query: `SELECT COUNT(*) FROM ramkrishnapudasaini_26_company.Office;`. Below the query box, a message indicates 'Your SQL query has been executed successfully.' The results table shows one row: 'COUNT(*)' with the value '6'.

8. Write a query to count the distinct names of Employees.

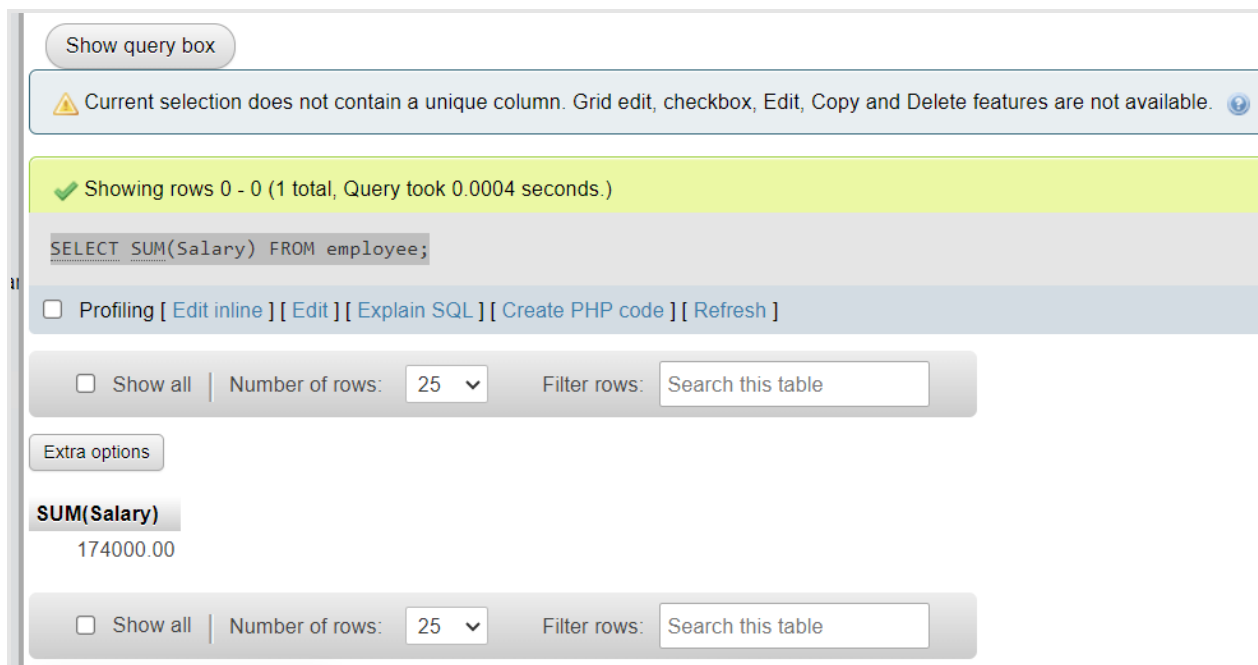
```
SELECT COUNT(DISTINCT Ename) FROM employee;
```



The screenshot shows the phpMyAdmin interface. On the left is the database navigation tree. The main panel displays the 'employee' table in the 'ramkrishnapudasaini_26_company' database. A message states: 'Your SQL query has been executed successfully.' Below this, the query 'SELECT COUNT(DISTINCT Ename) FROM employee;' is shown. Underneath the query, there are links for 'Profiling', 'Edit inline', 'Edit', 'Explain SQL', 'Create PHP code', and 'Refresh'. The 'Extra options' section shows the result: 'COUNT(DISTINCT Ename)' with a value of '6'. At the bottom, there is a 'Query results operations' button.

9. Write a query to find sum of salary of Employees.

```
SELECT SUM(Salary) FROM employee;
```



The screenshot shows the phpMyAdmin interface. The main panel displays the 'employee' table. A message states: 'Showing rows 0 - 0 (1 total, Query took 0.0004 seconds.)'. Below this, the query 'SELECT SUM(Salary) FROM employee;' is shown. Underneath the query, there are links for 'Profiling', 'Edit inline', 'Edit', 'Explain SQL', 'Create PHP code', and 'Refresh'. The 'Extra options' section shows the result: 'SUM(Salary)' with a value of '174000.00'. At the bottom, there are controls for 'Show all', 'Number of rows' (set to 25), and 'Filter rows' (Search this table).

10. Write a query to find average of salary of Employees.

```
SELECT AVG(Salary) FROM employee;
```

The screenshot shows the phpMyAdmin interface with the following elements:

- Show query box** button.
- Warning:** Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.
- Success message:** Showing rows 0 - 0 (1 total, Query took 0.0003 seconds.)
- SQL Query:** `SELECT AVG(Salary) FROM employee;`
- Options:** ☐ Profiling [[Edit inline](#)] [[Edit](#)] [[Explain SQL](#)] [[Create PHP code](#)] [[Refresh](#)]
- Table Controls:** ☐ Show all | Number of rows: 25 | Filter rows: Search this table
- Extra options** button.
- Table Header:** **AVG(Salary)**
- Table Data:** 29000.000000
- Table Controls (repeated):** ☐ Show all | Number of rows: 25 | Filter rows: Search this table
- Query results operations** button.
- Operations:** [Print](#), [Copy to clipboard](#), [Export](#), [Display chart](#), [Create view](#)

11. Write a query to find Maximum PF Amount from the PF Table.

```
SELECT MAX(Amount) FROM pf;
```

The screenshot shows the phpMyAdmin interface with the following elements:

- Server:** 127.0.0.1
- Database:** ramkrishnapudasani_26_company
- Table:** pf
- Show query box** button.
- Warning:** Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.
- Success message:** Showing rows 0 - 0 (1 total, Query took 0.0003 seconds.)
- SQL Query:** `SELECT MAX(Amount) FROM pf;`
- Options:** ☐ Profiling [[Edit inline](#)] [[Edit](#)] [[Explain SQL](#)] [[Create PHP code](#)] [[Refresh](#)]
- Table Controls:** ☐ Show all | Number of rows: 25 | Filter rows: Search this table
- Extra options** button.
- Table Header:** **MAX(Amount)**
- Table Data:** 3000.00

12. Write a query to find Minimum PF Amount from the PF Table.

```
SELECT MIN(Amount) FROM pf;
```

The screenshot shows the phpMyAdmin web interface. On the left, the database structure is visible, including the 'pf' table under the 'ramkrishnapudasani_26_company' database. The main panel displays the SQL query 'SELECT MIN(Amount) FROM pf;' and its execution results. 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 query results show a single row with the value '1000.00' for the 'MIN(Amount)' column. The interface also includes various toolbars for browsing, structure, SQL, search, insert, export, import, privileges, operations, and triggers. The bottom section shows query result operations like print, copy to clipboard, export, display chart, and create view.

Server: 127.0.0.1 » Database: ramkrishnapudasani_26_company » Table: pf

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 - 0 (1 total, Query took 0.0004 seconds)

SELECT MIN(Amount) FROM pf;

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

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

Extra options

MIN(Amount)
1000.00

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

Query results operations