

## LAB ASSIGNMENT 3

### 1. Select the names of employees and their dependents without using JOIN.

```
SELECT (SELECT Ename FROM employee WHERE SSN = dependents.SSN) AS  
EmployeeName, Dname AS DependentName FROM dependents;
```

The screenshot shows the phpMyAdmin interface. On the left, the database structure is visible, including the 'dependents' table. The main panel displays the query results for the query: `SELECT (SELECT Ename FROM employee WHERE SSN = dependents.SSN) AS EmployeeName, Dname AS DependentName FROM dependents;`. The results are shown in a table with 5 rows. The query took 0.0005 seconds to execute.

EmployeeName	DependentName
RamKrishnaPudasaini	Denish
RamKrishnaPudasaini	Gayatri
Deric	Dependent1
John	Dependent2
Jane	Dependent3

### 2. Select the names of employees and their dependents without using INNER JOIN and order the result based on the dependents name.

```
SELECT (SELECT Ename FROM Employee WHERE SSN = dependents.SSN) AS  
EmployeeName, Dname AS DependentName FROM dependents ORDER BY Dname;
```

The screenshot shows the phpMyAdmin interface. On the left, the database structure is visible, including the 'dependents' table. The main panel displays the query results for the query: `SELECT (SELECT Ename FROM Employee WHERE SSN = dependents.SSN) AS EmployeeName, Dname AS DependentName FROM dependents ORDER BY Dname;`. The results are shown in a table with 5 rows, ordered by the dependent name. The query took 0.0006 seconds to execute.

EmployeeName	DependentName
RamKrishnaPudasaini	Denish
Deric	Dependent1
John	Dependent2
Jane	Dependent3
RamKrishnaPudasaini	Gayatri

3. Use JOIN between Employee, Project and Works\_on and retrieve the name of employees and the projects on which they work.

```
SELECT employee.Ename AS EmployeeName, project.Pname AS ProjectName FROM employee JOIN works_on ON employee.SSN = works_on.ESSN JOIN project ON works_on.Pno = project.Pnumber;
```

The screenshot shows the phpMyAdmin interface with a query executed. The query is: `SELECT employee.Ename AS EmployeeName, project.Pname AS ProjectName FROM employee JOIN works_on ON employee.SSN = works_on.ESSN JOIN project ON works_on.Pno = project.Pnumber;` The result shows 3 rows. The table structure on the left shows the 'employee' table with columns: Dage (int, NULL), Did (PRI, int), Dname (varchar), Drelation (varchar), SSN (MUL, int, NULL).

EmployeeName	ProjectName
RamKrishnaPudasaini	Project2
RamKrishnaPudasaini	Project3
John	Project2

4. Use Inner join between Employee and PF table with the join condition, Employee.SSN=PF.SSN and Employee.Salary>PF.Amount

```
SELECT employee.Ename AS EmployeeName, pf.Amount FROM employee INNER JOIN pf ON employee.SSN = pf.SSN WHERE employee.Salary > pf.Amount;
```

The screenshot shows the phpMyAdmin interface with a query executed. The query is: `SELECT employee.Ename AS EmployeeName, pf.Amount FROM employee INNER JOIN pf ON employee.SSN = pf.SSN WHERE employee.Salary > pf.Amount;` The result shows 6 rows. The table structure on the left shows the 'employee' table with columns: Dage (int, NULL), Did (PRI, int), Dname (varchar), Drelation (varchar), SSN (MUL, int, NULL).

EmployeeName	Amount
RamKrishnaPudasaini	1000.00
Deric	1500.00
John	1500.00
Jane	3000.00
David	2500.00
Emily	1200.00

## 5. Write a query to show the results of Left and Right Join between Office and Project.

```
SELECT office.Oname, project.Pname FROM office LEFT JOIN project ON  
office.Onumber = Project.Onumber;
```

✓ Showing rows 0 - 8 (9 total, Query took 0.0005 seconds.)

```
SELECT office.Oname, project.Pname FROM office LEFT JOIN project ON office.Onumber = Project.Onumber;
```

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

Extra options

Oname	Pname
Office2	Project2
RamKrishna_Office_26	Project3
Office2	Project4
RamKrishna_Office_26	Project5
RamKrishna_Office_26	RamkrishnaPudasaini_ProjMDS
Office3	NULL
Office4	NULL
Office5	NULL
RamKrishna_9843342697_26	NULL

### Right Join

```
SELECT office.Oname, project.Pname FROM office RIGHT JOIN project ON  
office.Onumber = Project.Onumber;
```

✓ Showing rows 0 - 4 (5 total, Query took 0.0006 seconds.)

```
SELECT office.Oname, project.Pname FROM office RIGHT JOIN project ON office.Onumber = Project.Onumber;
```

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

Extra options

Oname	Pname
Office2	Project2
RamKrishna_Office_26	Project3
Office2	Project4
RamKrishna_Office_26	Project5
RamKrishna_Office_26	RamkrishnaPudasaini_ProjMDS

6. Write a query to show the results of Cross Join between Employee and PF tables.

```
SELECT employee.Ename AS EmployeeName, pf.Amount FROM employee CROSS JOIN pf;
```

The screenshot shows the phpMyAdmin interface for a database named 'ramkrishnapudasaini\_26\_company'. The left sidebar displays the database structure, including tables like 'employee' and 'office'. The main panel shows a SQL query: `SELECT employee.Ename AS EmployeeName, pf.Amount FROM employee CROSS JOIN pf;`. The query has been executed, showing 24 rows. The results are displayed in a table with two columns: 'EmployeeName' and 'Amount'.

EmployeeName	Amount
RamKrishnaPudasaini	1000.00
Deric	1000.00
John	1000.00
Jane	1000.00
David	1000.00
Emily	1000.00
RamKrishnaPudasaini	1500.00
Deric	1500.00
John	1500.00
Jane	1500.00
David	1500.00
Emily	1500.00
RamKrishnaPudasaini	1500.00
Deric	1500.00
John	1500.00
Jane	1500.00
David	1500.00
Emily	1500.00
RamKrishnaPudasaini	3000.00
Deric	3000.00
John	3000.00
Jane	3000.00
David	3000.00
Emily	3000.00
RamKrishnaPudasaini	2500.00

## 7. Show results of using natural join between Employee and PF.

```
SELECT employee.EName AS EmployeeName, pf.Amount FROM employee NATURAL JOIN pf;
```

The screenshot shows the phpMyAdmin interface with the 'employee' table selected in the 'ramkrishnapudasaini\_26\_company' database. The query 'SELECT employee.EName AS EmployeeName, pf.Amount FROM employee NATURAL JOIN pf;' is entered in the SQL tab. The results show 6 rows, indicating a successful NATURAL JOIN. The table has columns 'EmployeeName' and 'Amount'.

EmployeeName	Amount
RamKrishnaPudasaini	1000.00
Deric	1500.00
John	1500.00
Jane	3000.00
David	2500.00
Emily	1200.00

## 8. Find the number of employees and status in each status of “Married”, “Single”, “Divorced”. Use the COUNT function with the GROUP BY clause with status.

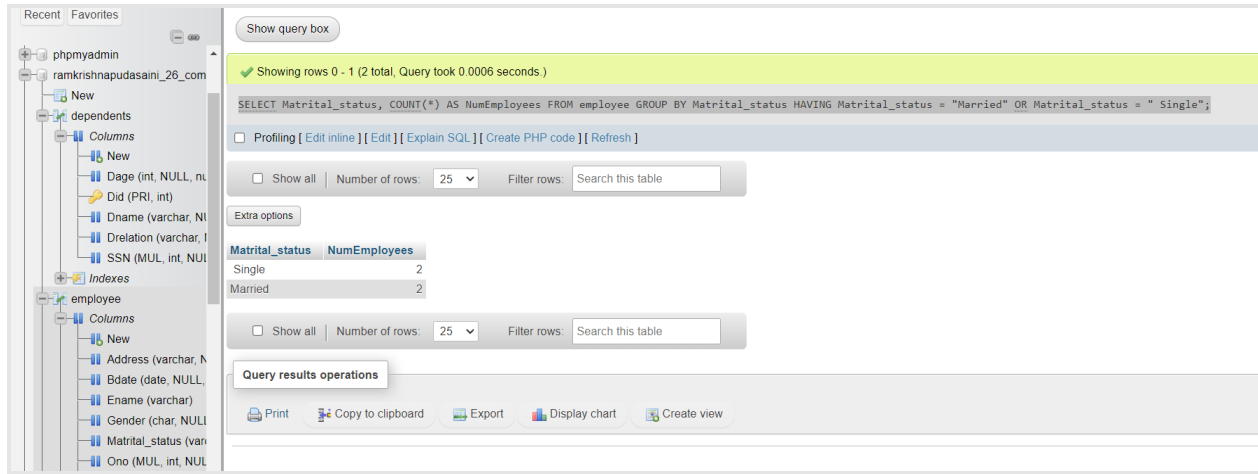
```
SELECT Matrital_status, COUNT(*) AS NumEmployees FROM employee GROUP BY Matrital_status;
```

The screenshot shows the phpMyAdmin interface with the 'employee' table selected. The query 'SELECT Matrital\_status, COUNT(\*) AS NumEmployees FROM employee GROUP BY Matrital\_status;' is entered in the SQL tab. The results show 4 rows, indicating a successful GROUP BY query. The table has columns 'Matrital\_status' and 'NumEmployees'.

Matrital_status	NumEmployees
NULL	1
Single	2
Divorced	1
Married	2

9. Find the number of employees and status in each status of “Married” OR “Single”. Use the COUNT function with the GROUP BY clause with status and Having clause with status = “Married” OR “Single”

```
SELECT Matrital_status, COUNT(*) AS NumEmployees FROM employee GROUP BY Matrital_status HAVING Matrital_status = "Married" OR Matrital_status = "Single";
```



Showing rows 0 - 1 (2 total, Query took 0.0006 seconds)

```
SELECT Matrital_status, COUNT(*) AS NumEmployees FROM employee GROUP BY Matrital_status HAVING Matrital_status = "Married" OR Matrital_status = "Single";
```

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

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

Extra options

Matrital_status	NumEmployees
Single	2
Married	2

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

Query results operations

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10. Using sub query, select the name and location of projects whose Onumber is in the Onumber of the offices located in country Nepal and India.

```
SELECT Pname, Proj_location FROM project WHERE Onumber IN (SELECT Onumber FROM office WHERE Country IN ('Nepal', 'India'));
```