L13 : SET Operations

1-Tut : **SQL Query - 1**

Send Feedback

Problem Statement:

Using the tables given below, list out all the employees of the company.

Information about the table:

Table **Empdept1:** :

EmpCode	EmpFName	EmpLName	Job
9369	TONY	STARK	SOFTWARE ENGINEER
9499	TIM	ADOLF	SALESMAN
9566	KIM	JARVIS	MANAGER
9654	SAM	MILES	SALESMAN

Table **Empdept2**:

EmpCode	EmpFName	EmpLName	Job
9566	KIM	JARVIS	MANAGER
9902	ANDREW	FAULKNER	ANALYST
9685	SAMAY	DAGA	SALESMAN

Output Table Structure:

```
+---------+----------+----------+--------------------+
| EmpCode | EmpFName | EmpLName | Job                |
+---------+----------+----------+--------------------+
```

Note-1: The data should not contain duplicate rows of employees.

Note-2: Write keywords of syntax in uppercase alphabets.

```
Select * from Empdept1
union
select * from Empdept2;
```

2-Tut : **SQL Query - 2**

Send Feedback

Problem Statement:

List down employees (all the details) from both the departments who work as Salesman.

Information about the table:
Table **Empdept1:** :

EmpCode	EmpFName	EmpLName	Job
9369	TONY	STARK	SOFTWARE ENGINEER
9499	TIM	ADOLF	SALESMAN
9566	KIM	JARVIS	MANAGER
9654	SAM	MILES	SALESMAN

Table **Empdept2**:

EmpCode	EmpFName	EmpLName	Job
9566	KIM	JARVIS	MANAGER
9902	ANDREW	FAULKNER	ANALYST
9685	SAMAY	DAGA	SALESMAN

Output Table Structure:

```
+---------+----------+----------+--------------------+
| EmpCode | EmpFName | EmpLName | Job                |
+---------+----------+----------+--------------------+
```

Note-1: The data should contain duplicate rows of employees.

Note-2: Write keywords of syntax in uppercase alphabets.

```
select * from Empdept1 where job = 'SALESMAN'
union
select * from Empdept2 where job = 'SALESMAN';
```

3-Tut : SQL Query - 3

Send Feedback

Problem Statement:

List out each employee name and employee code from both the departments and order them in ascending order by their code.

Information about the table:
Table **Empdept1:** :

EmpCode	EmpFName	EmpLName	Job
9369	TONY	STARK	SOFTWARE ENGINEER
9499	TIM	ADOLF	SALESMAN
9566	KIM	JARVIS	MANAGER
9654	SAM	MILES	SALESMAN

Table **Empdept2**:

EmpCode	EmpFName	EmpLName	Job
9566	KIM	JARVIS	MANAGER
9902	ANDREW	FAULKNER	ANALYST
9685	SAMAY	DAGA	SALESMAN

Output Table Structure:

```
+----------+----------+---------+
| EmpFName | EmpLName | EmpCode |
+----------+----------+---------+
```

Note-1: Duplicates are allowed.

Note-2: Write keywords of syntax in uppercase alphabets.

```
select EmpFname,EmpLName,EmpCode from Empdept1
union all
select EmpFname,EmpLName,EmpCode from Empdept2 order by EmpCode ASC;
```

4-Tut : SQL Query - 4

Send Feedback

Problem Statement:

Find out all the details of employees that work for both the departments.

Information about the table:

Table **Empdept1:** :

EmpCode	EmpFName	EmpLName	Job
9369	TONY	STARK	SOFTWARE ENGINEER
9499	TIM	ADOLF	SALESMAN
9566	KIM	JARVIS	MANAGER
9654	SAM	MILES	SALESMAN

Table **Empdept2**:

EmpCode	EmpFName	EmpLName	Job
9566	KIM	JARVIS	MANAGER
9902	ANDREW	FAULKNER	ANALYST
9685	SAMAY	DAGA	SALESMAN

Output Table Structure:

```
+---------+----------+----------+--------------------+
| EmpCode | EmpFName | EmpLName | Job                |
+---------+----------+----------+--------------------+
```

Note-1: The data should not contain duplicate rows of employees.

Note-2: Write keywords of syntax in uppercase alphabets.

```
SELECT DISTINCT
Empdept1.EmpCode,Empdept1.EmpFName,Empdept1.EmpLName,Empdept1.Job
FROM Empdept1
INNER JOIN Empdept2 ON Empdept1.EmpCode=Empdept2.EmpCode;
```

5-Tut : SQL Query - 10

Send Feedback

Problem Statement:

List down all the details of employees working in dept1 but not in Dept2.

Information about the table:

Table **Empdept1:** :

EmpCode	EmpFName	EmpLName	Job
9369	TONY	STARK	SOFTWARE ENGINEER
9499	TIM	ADOLF	SALESMAN
9566	KIM	JARVIS	MANAGER
9654	SAM	MILES	SALESMAN

Table **Empdept2**:

EmpCode	EmpFName	EmpLName	Job
9566	KIM	JARVIS	MANAGER
9902	ANDREW	FAULKNER	ANALYST
9685	SAMAY	DAGA	SALESMAN

Output Table Structure:

```
+---------+----------+----------+--------------------+
| EmpCode | EmpFName | EmpLName | Job                |
+---------+----------+----------+--------------------+
```

Note-1: Write keywords of syntax in uppercase alphabets.

Note-2: Use employee code to link the two tables.

```
SELECT Empdept1.EmpCode,Empdept1.EmpFName,Empdept1.EmpLName,Empdept1.Job
FROM Empdept1
LEFT JOIN Empdept2
 ON Empdept1.EmpCode=Empdept2.EmpCode
WHERE
 Empdept2.EmpCode IS NULL;
```

6-Tut : SQL query - 11

Send Feedback

Problem Statement:

Formulate a MySQL query to list out all the projects(id, name) and employee's names (first, last) along with their respective Email id's irrespective of the fact if that project is assigned or not and whether an employee is assigned any project or none.

Information about the table:

Table **Employee:** :

EmpID	EmpFname	EmpLname	Age	EmailID	PhoneNo	City
1	Riya	Khanna	21	riya@abc.com	987655443	Delhi
2	Sahil	Kumar	32	sahil@abc.com	987657643	Mumbai
3	Vishwas	Aanand	24	vishwas@abc.com	987658871	Kolkata
4	Harleen	Kaur	27	harleen@abc.com	987677585	Bengaluru
5	Priyanshu	Gupta	23	priyanshu@abc.com	956758556	Hyderabad

Table **Project**:

ProjectID	EmpID	ProjectName	ProjectStartDate	ClientID
100	1	pro_1	2021-04-21	3
200	2	pro_2	2021-03-12	1
300	3	pro_3	2021-01-16	5
400	3	pro_4	2021-04-27	2
500	5	pro_5	2021-05-01	4
600	9	pro_6	2021-01-19	1
700	7	pro_7	2021-08-27	2
800	8	pro_8	2021-09-15	3

Output Table Structure:

```
+-----------+-------------+-----------+----------+-------------------+
| ProjectID | ProjectName | EmpFname  | EmpLname | EmailID           |
+-----------+-------------+-----------+----------+-------------------+
```

Hint: Use Full Join, but MySql doesn't support the "Full Join" clause.

Note-1: Write keywords of syntax in uppercase alphabets.

Note-2: Use employee ID to link the two tables.

```
SELECT Project.ProjectID, Project.ProjectName, Employee.EmpFname, Employee.EmpLname,
Employee.EmailID FROM Project
LEFT JOIN Employee ON Project.EmpID = Employee.EmpID
UNION
SELECT Project.ProjectID, Project.ProjectName, Employee.EmpFname, Employee.EmpLname,
Employee.EmailID FROM Project
RIGHT JOIN Employee ON Project.EmpID = Employee.EmpID;
```