**Lab File**

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**USN:18BTRSE031**

**Subject: Database Management Systems Lab**

**Subject Code: 18CS4SP04L**

**Question 5**: Create the table for

(a) COMPANY database

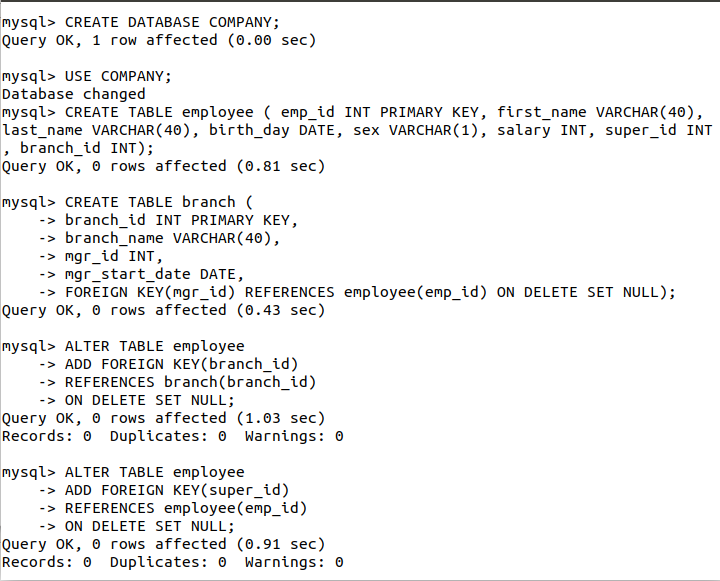
(b) STUDENT database

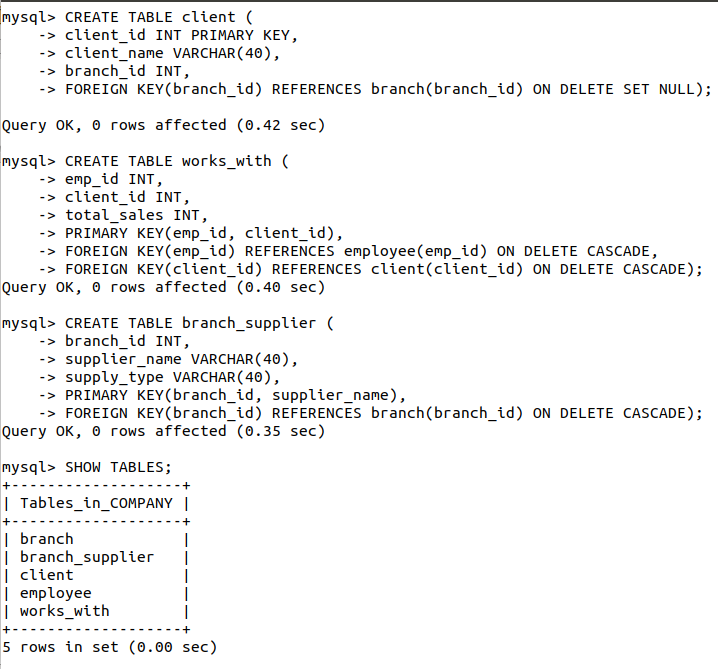
and Insert five records for each attributes.

**Aim:** To create a table for company database and student database and insert 5 rows in each attributes.

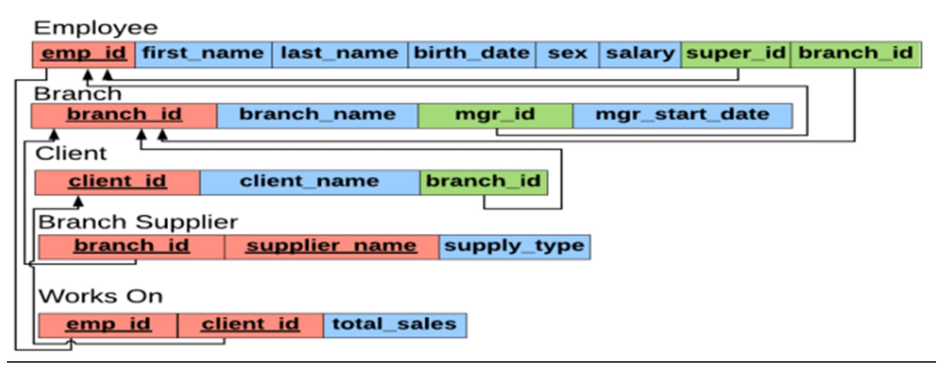
**(a) COMPANY database**

**SQL Queries :-**

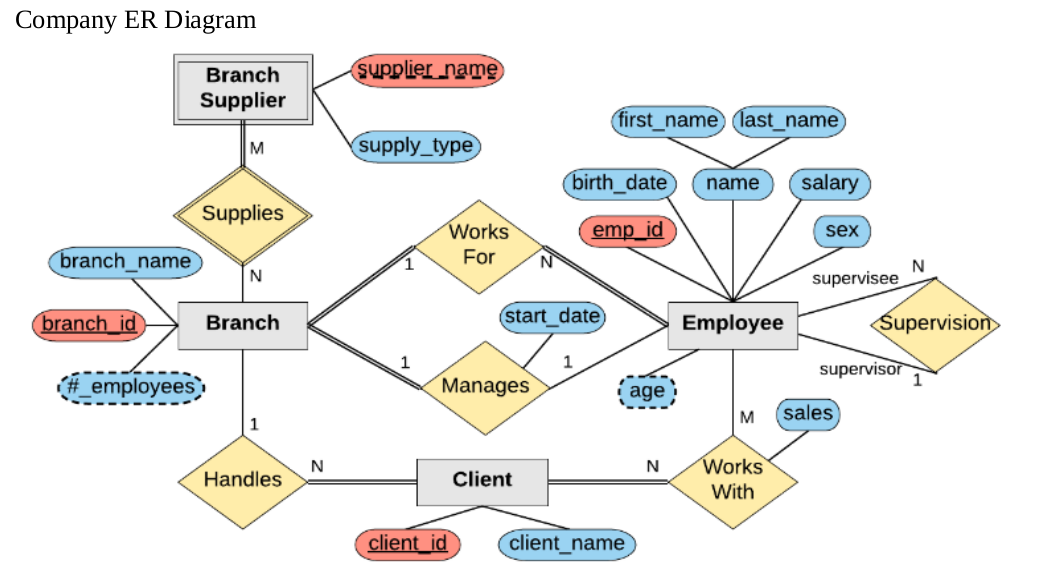




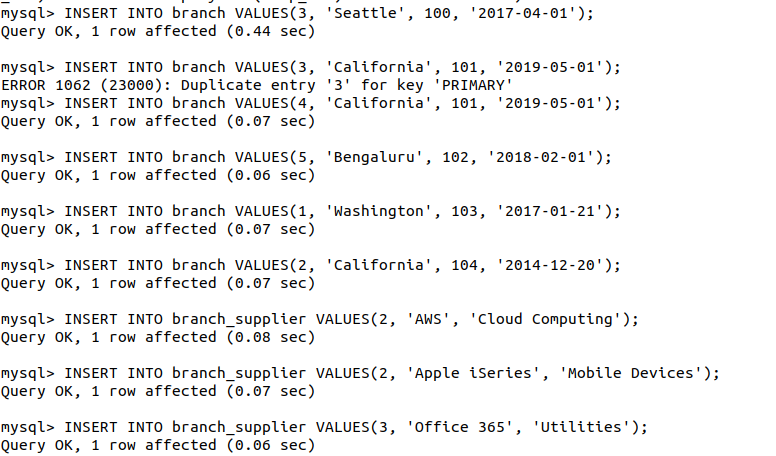
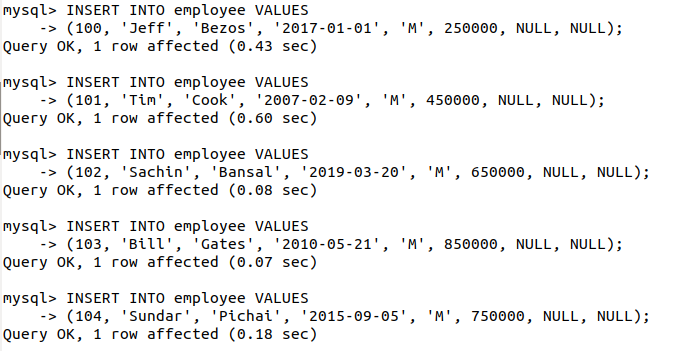
**Company Database Schema**

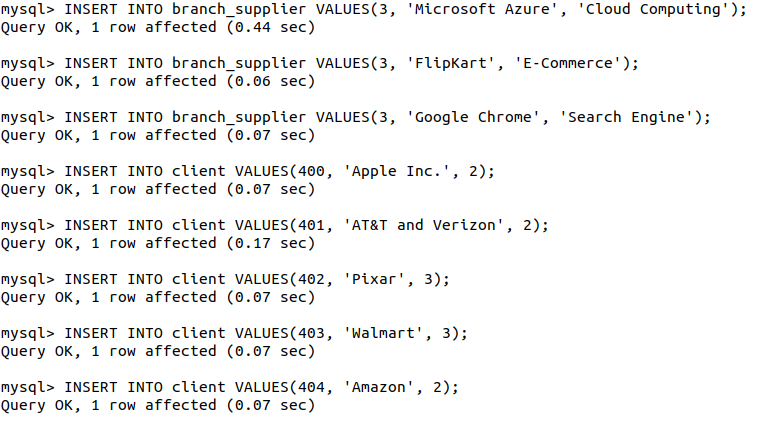


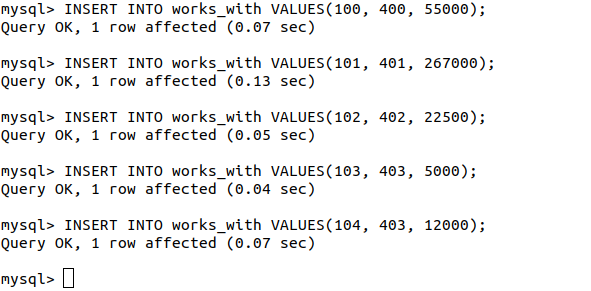
**Company ER Diagram**



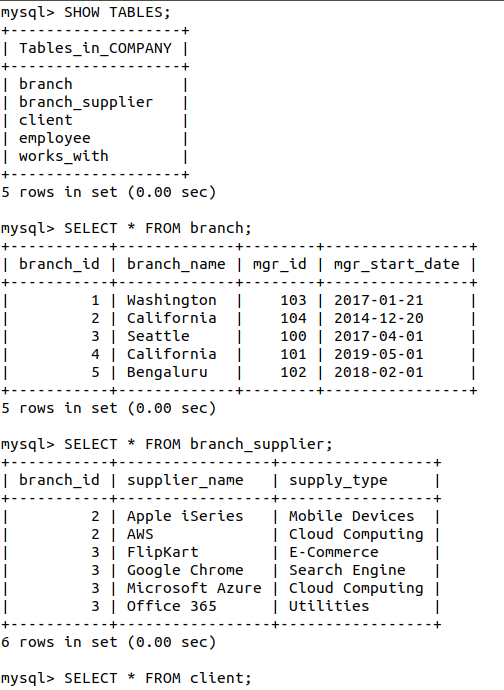
Insertion of rows to the tables employee, branch,branh\_supplier, clients and works\_with respectively:

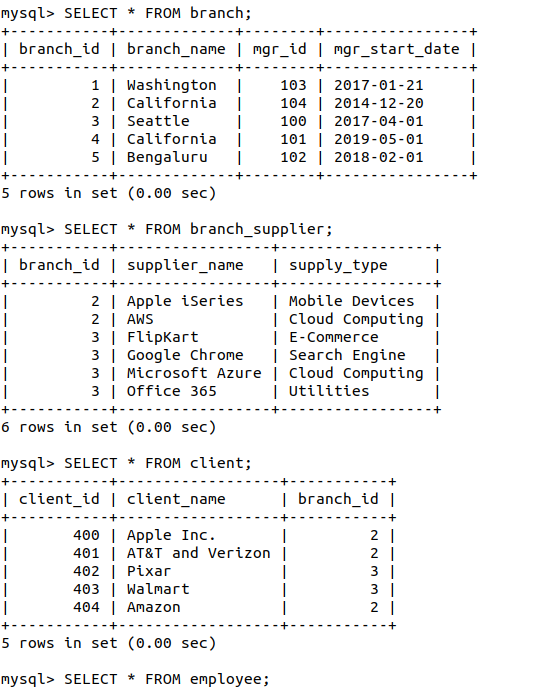


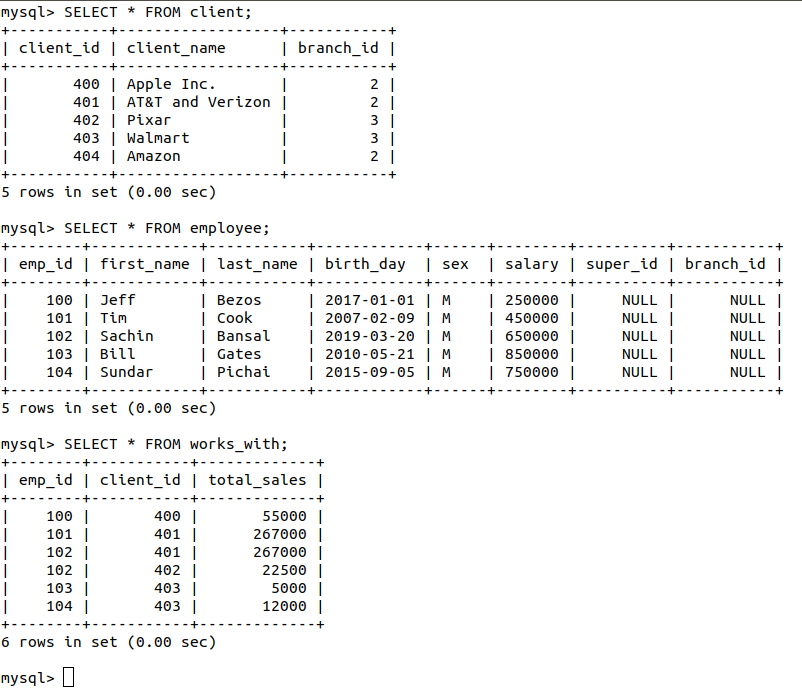




**Display of All Tables :-**

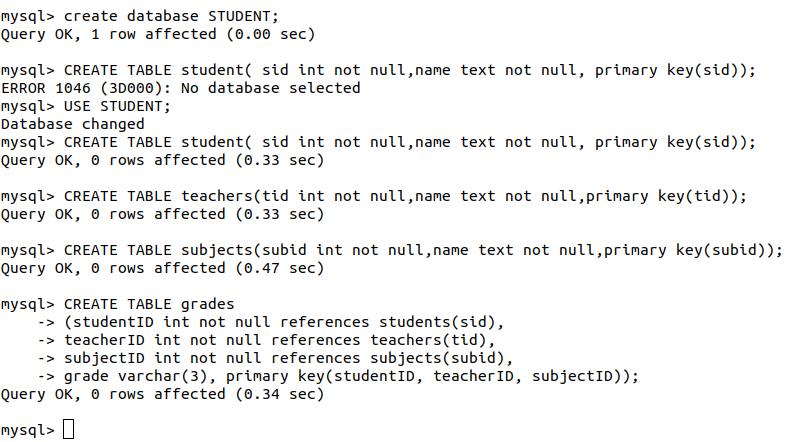


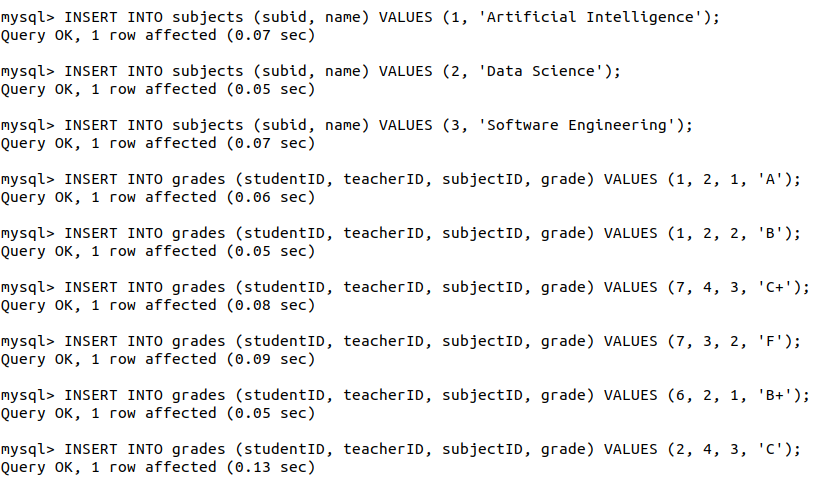


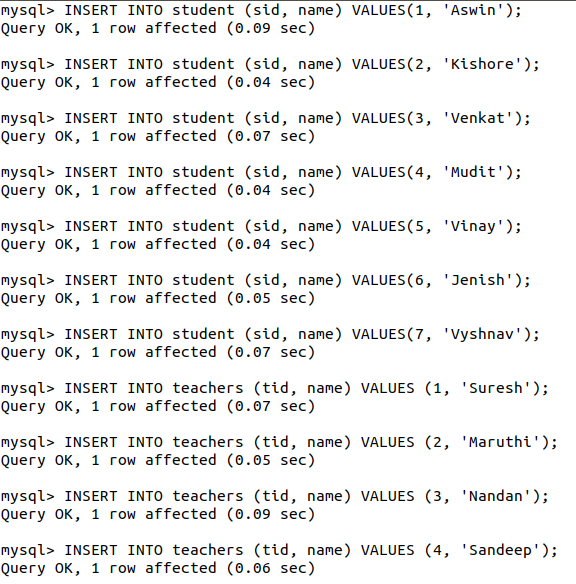


**(b) STUDENT database**

**SQL Queries :-**

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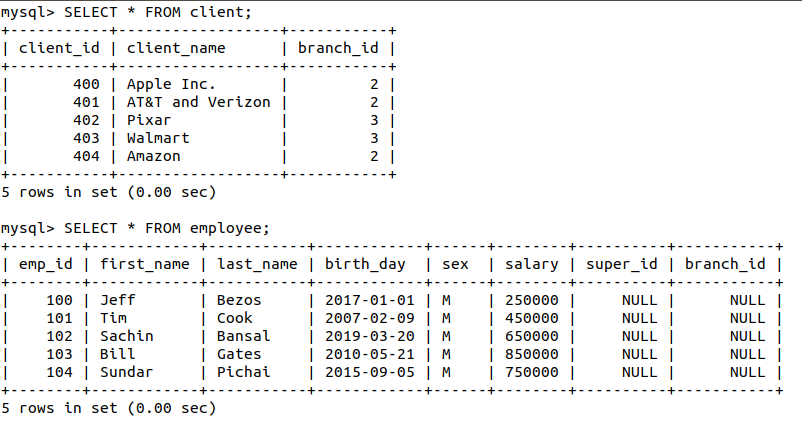


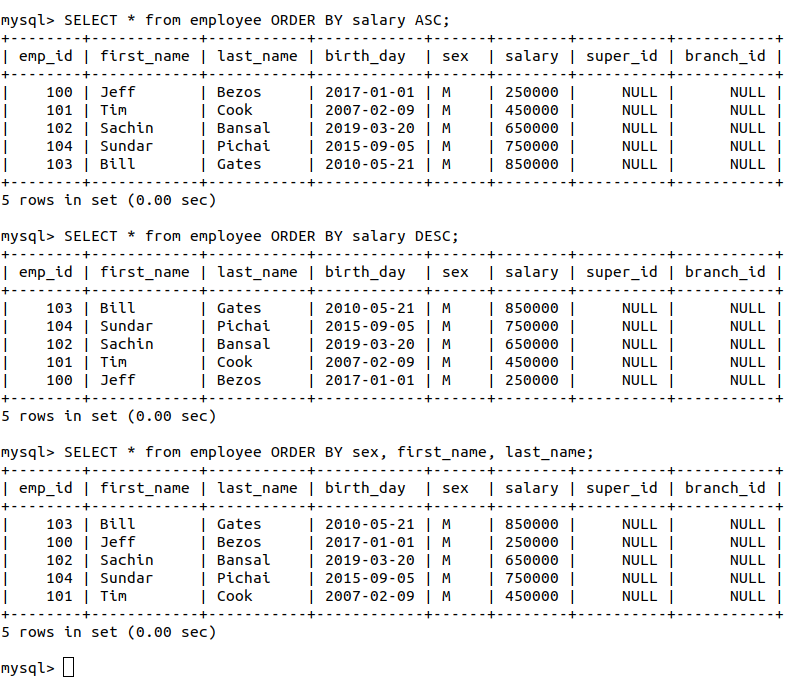
Result: I have successfully created company database and student database and also successfully inserted the values in both database.

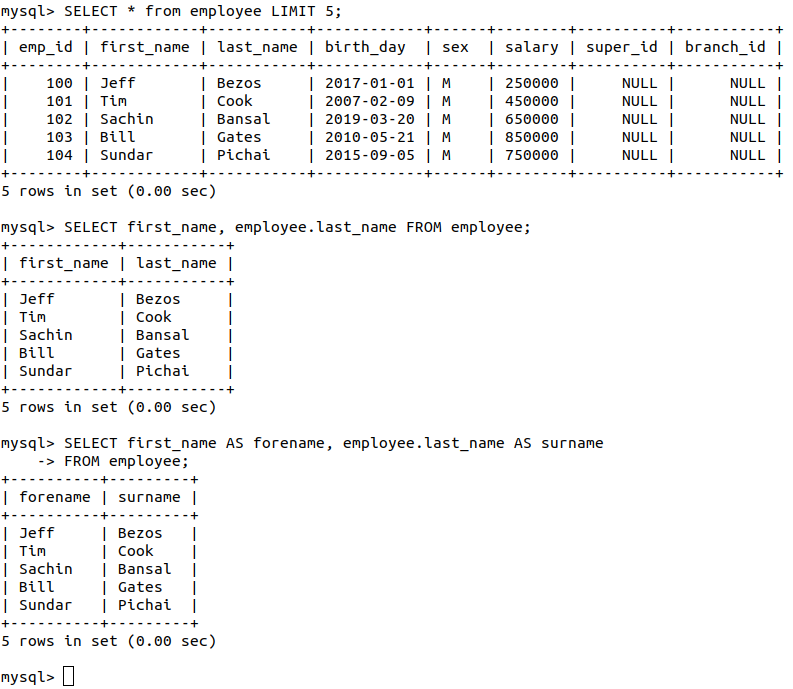
**Question 6**: Illustrate the use of SELECT statement

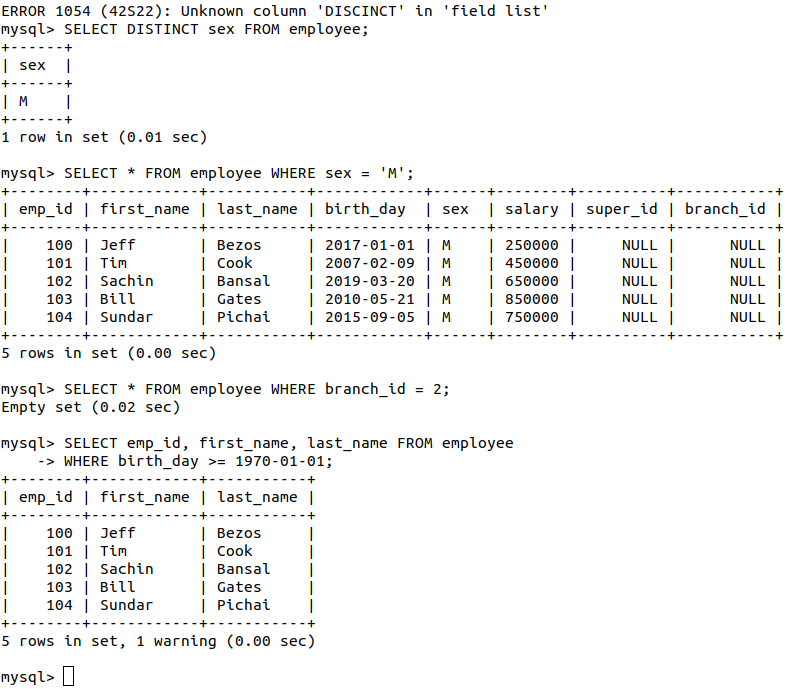
**Aim:** To understand the uses of select statement in various cases

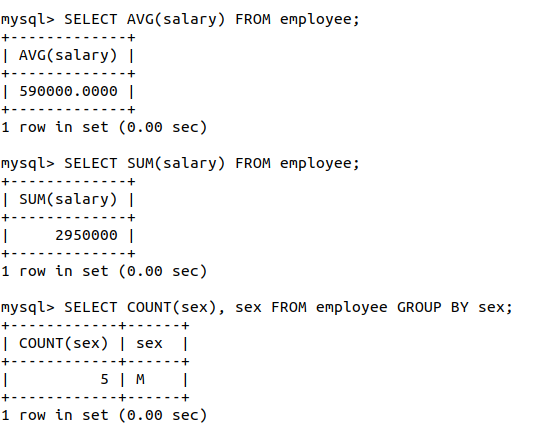
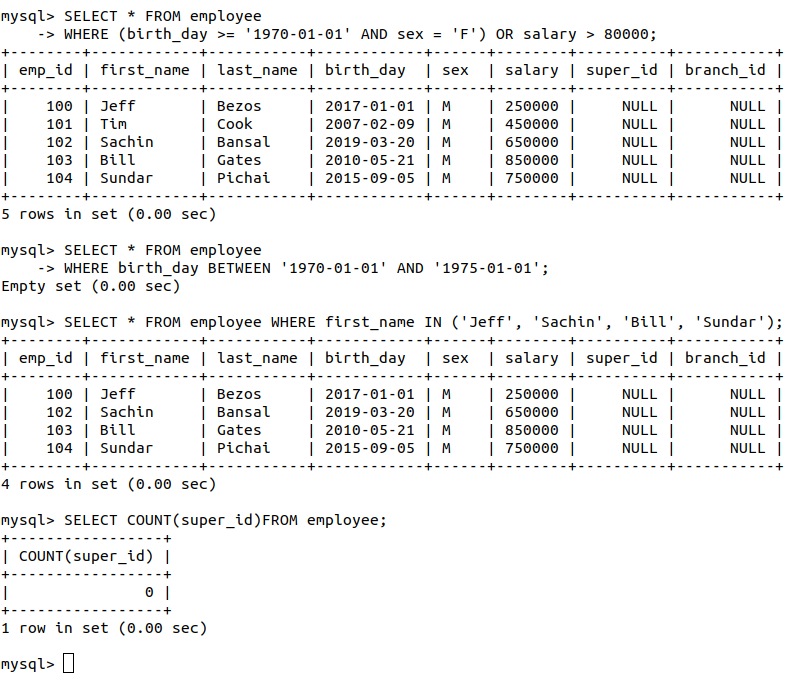
**SQL Queries :-**

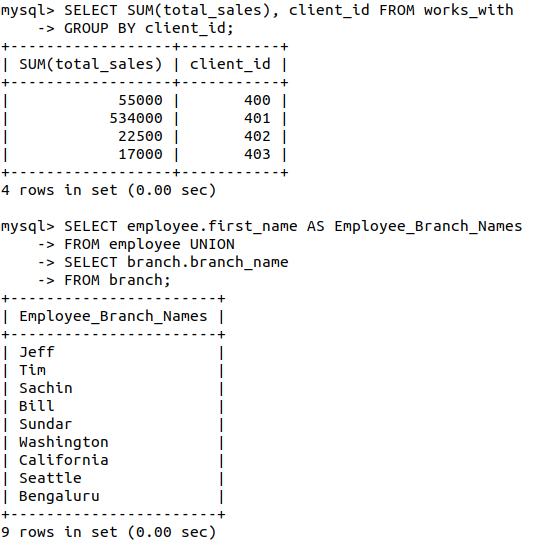




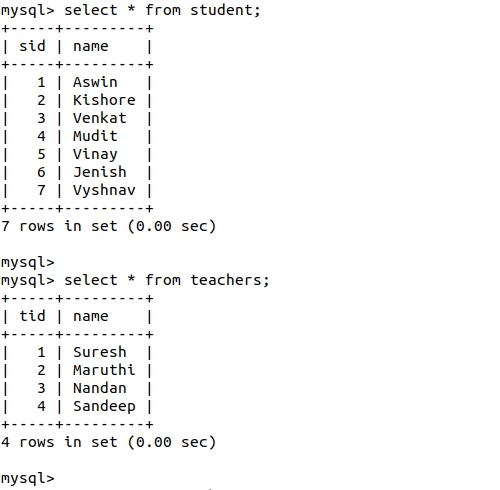




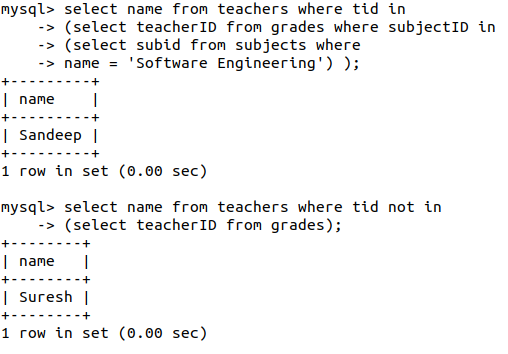
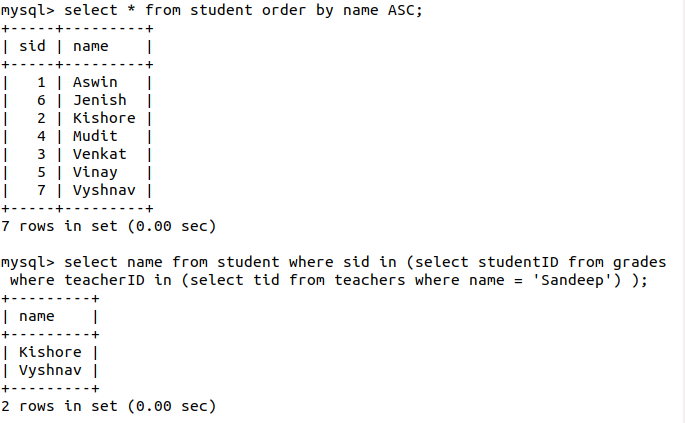




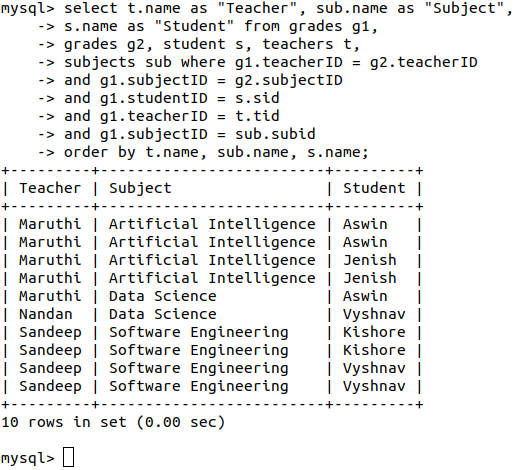
**SQL Queries :-**









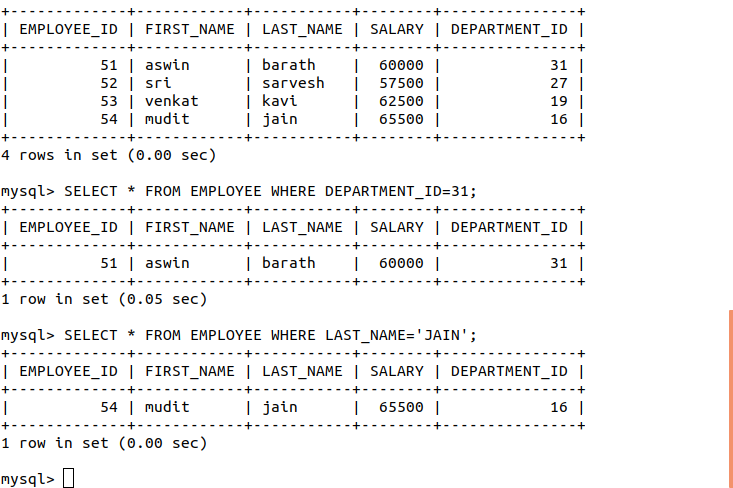


**Result:** I have successfully observed and executed the various types of use of select statement.

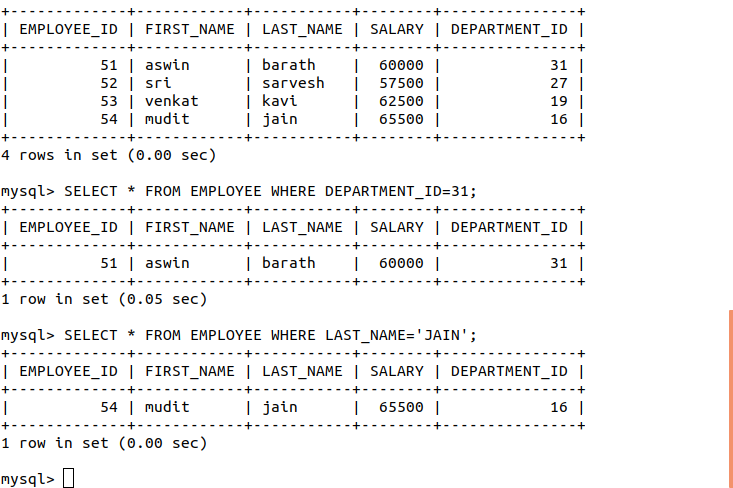
**Question 7 :** Conditional retrieval - WHERE clause.

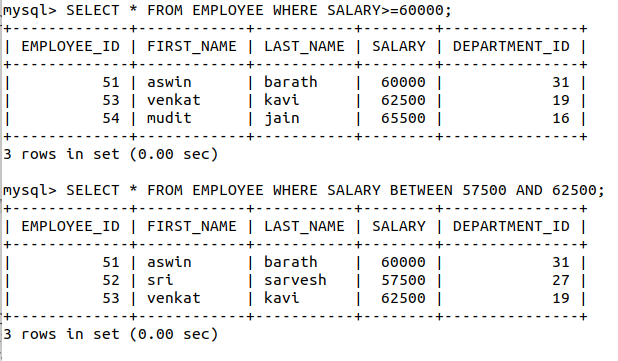
**Aim:** To observe the use in where clause in various process.

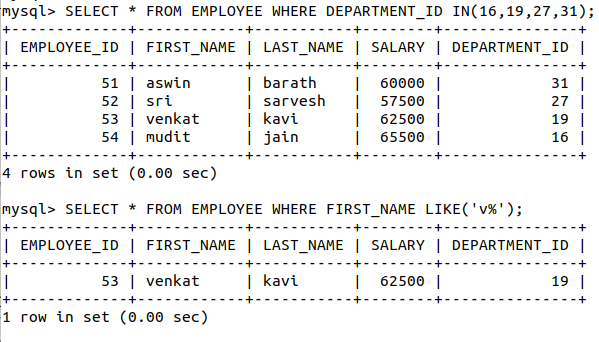
Consider the following table :-

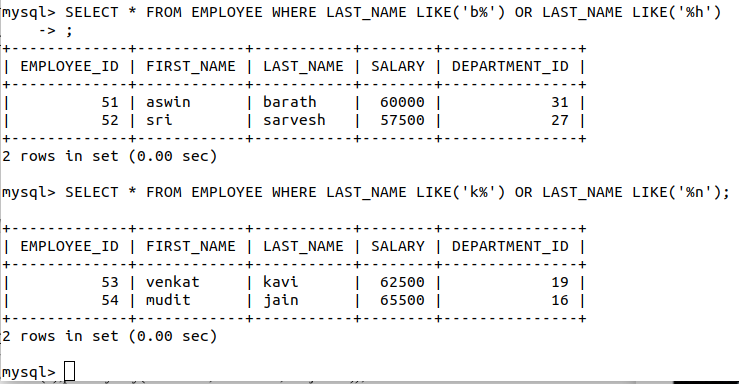


**SQL Queries :-**

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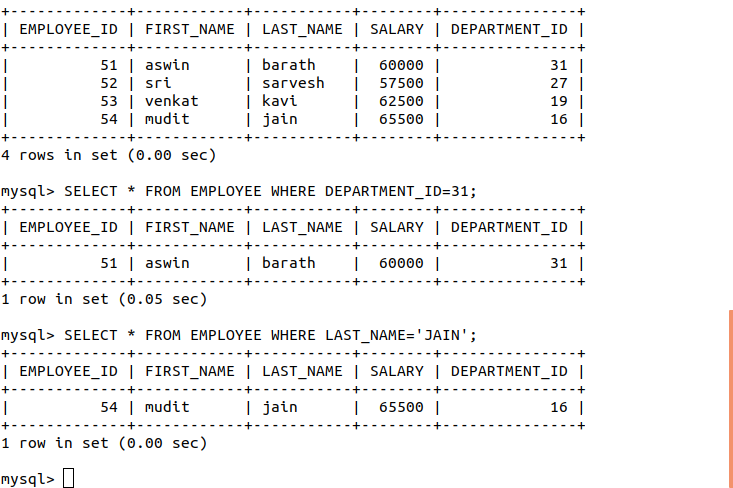
**Result:** Various uses of where clause is observed carefully and executed successfully.

**Question 8**: Query sorted - ORDER BY clause

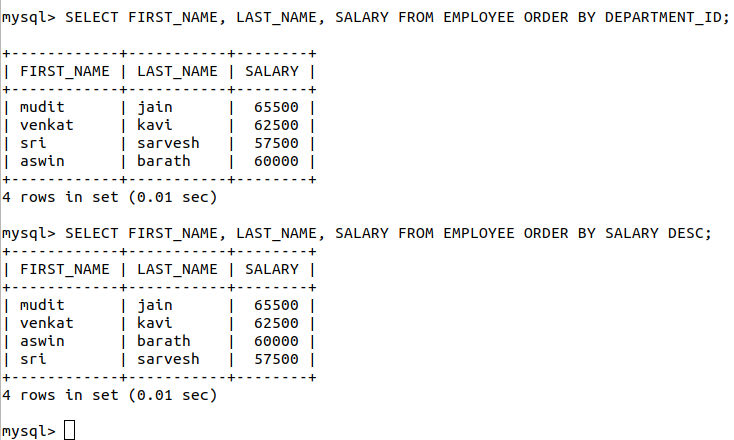
**Aim:** To know about order by clause and display the result of using

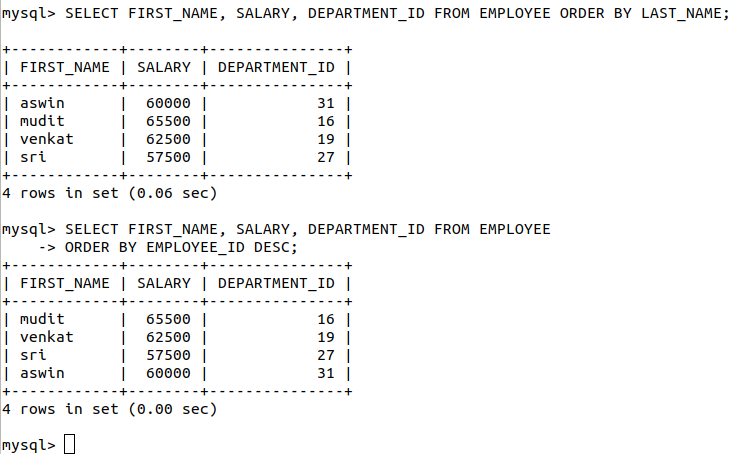
order by clause.

Consider the following table :-



**SQL Queries :-**



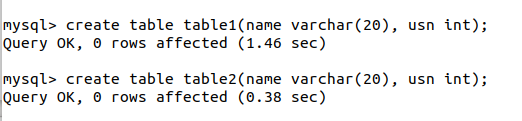


**Result:** I have used the both order by clause and got the idea how it is working and also successfully attach the files.

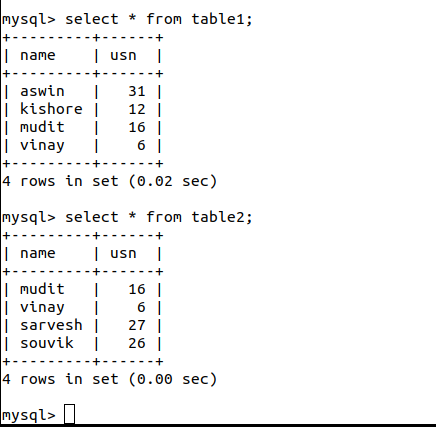
**Question 9(a)**: UNION, INTERSECTION and MINUS operations on tables

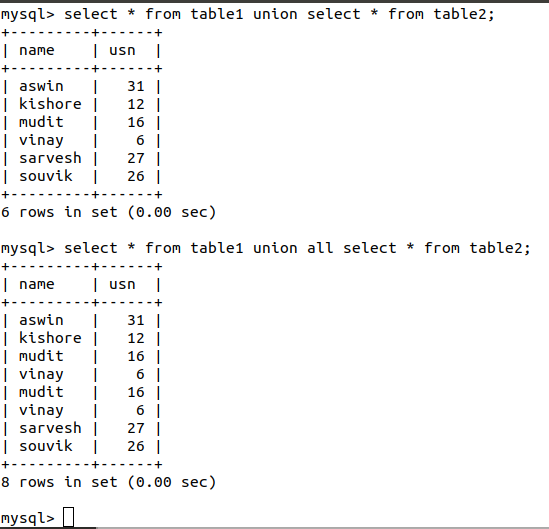
**Aim:** To get the full idea on UNION, INTERSECTION and MINUS on a table

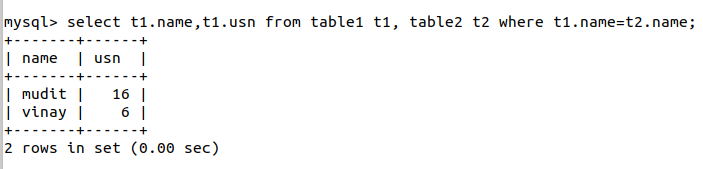
Consider two tables named table1 and table2 with same attributes name and usn :-



**SQL Queries :-**





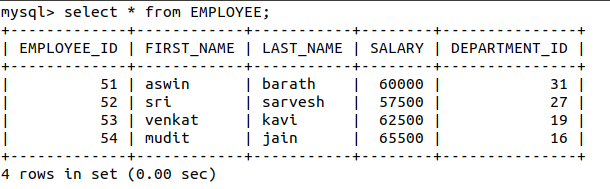


**Result:** I have successfully completed the union, intersection, minus operation on a table.

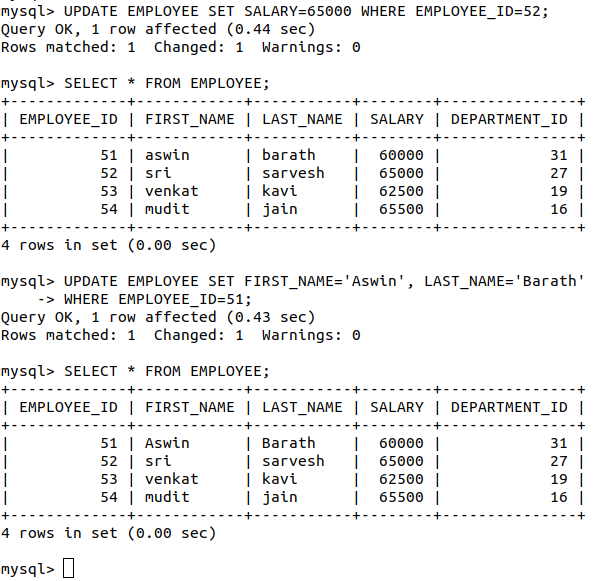
**Question 9(b)**: UPDATE, ALTER, DELETE, DROP operations on tables

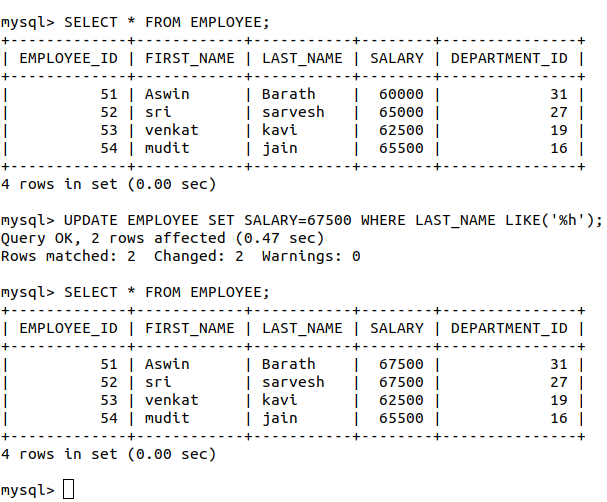
**Aim**: To use update, alter, delete, drop statement in various ways in a table and observe the behavior of these command.

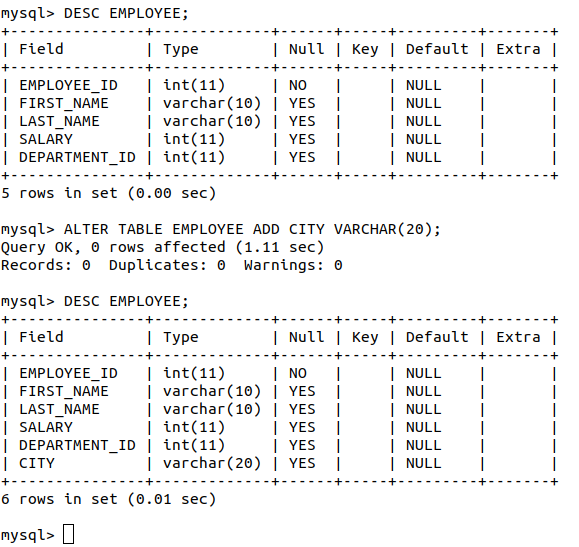
Consider the following table :-

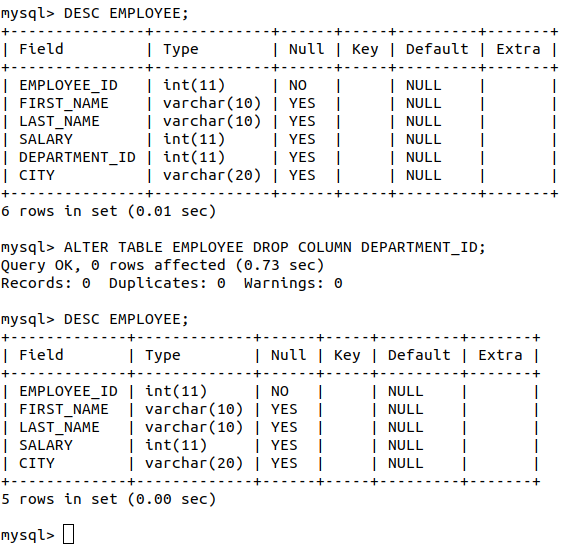


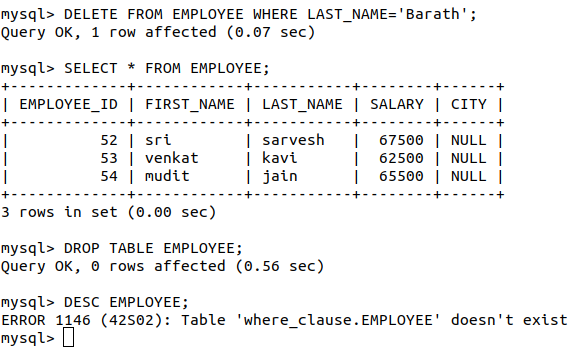
**SQL Queries :-**









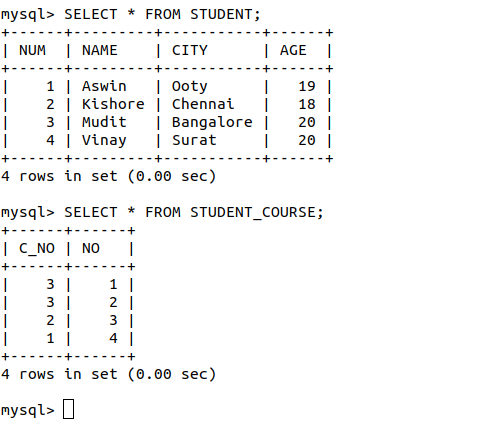


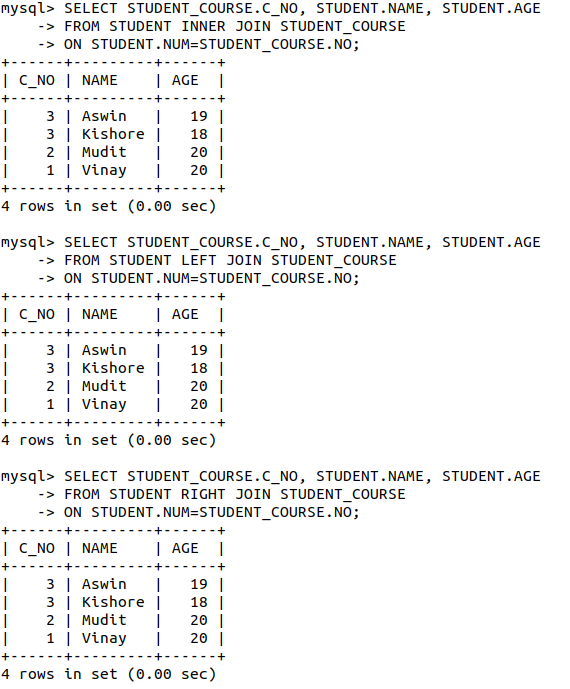
**Result**: I have successfully executed UPDATE, ALTER, DELETE, DROP SQL commands.

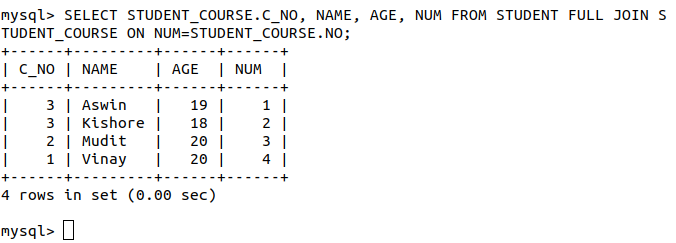
**Question 10:** Query multiple tables using JOIN operation.

**Aim:** To use all join operation on two tables

Consider the following two tables for join operations :-





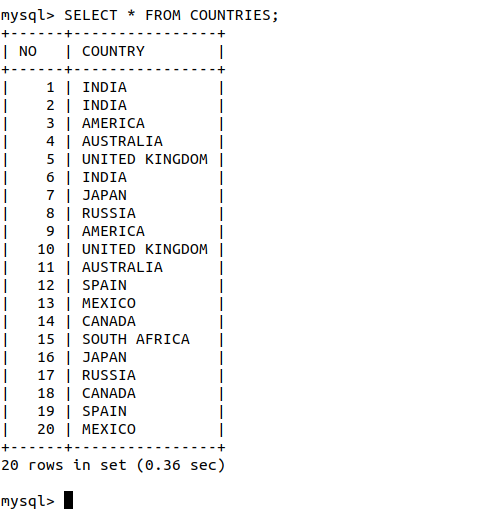


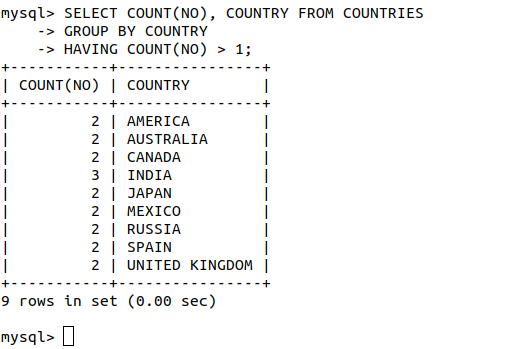
**Result**:I have successfully executed all types of join (Inner Join, Left Join, Right Join, Full Join) commands on two tables.

**Question 11:** Grouping the result of query - GROUP BY clause and HAVING clause

**Aim:** To use the group by clause and having clause. As we know also having clause is optional.

Consider the following table:

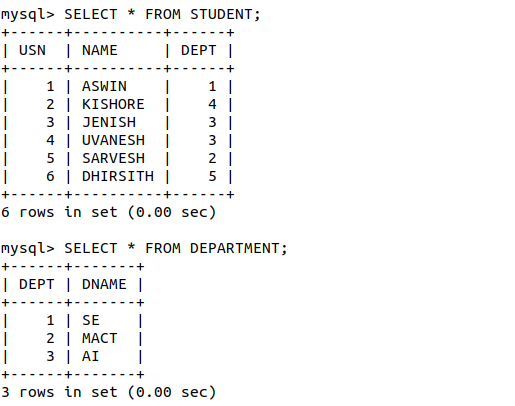




**Result:** I have successfully executed the “group by” and “having” clause commands.

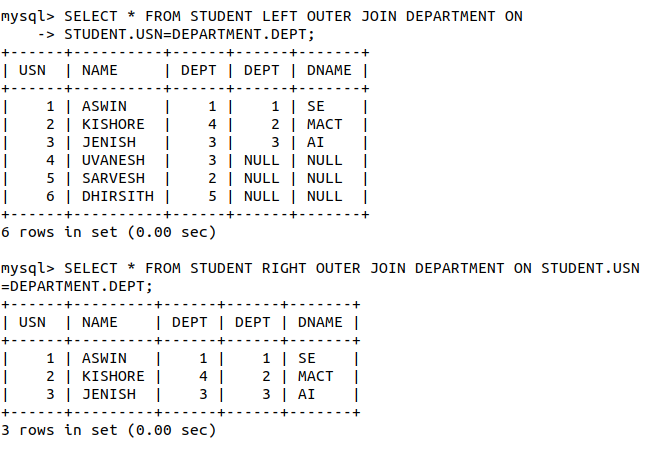
**Question 12:** Query multiple tables using NATURAL and OUTER JOIN operation.

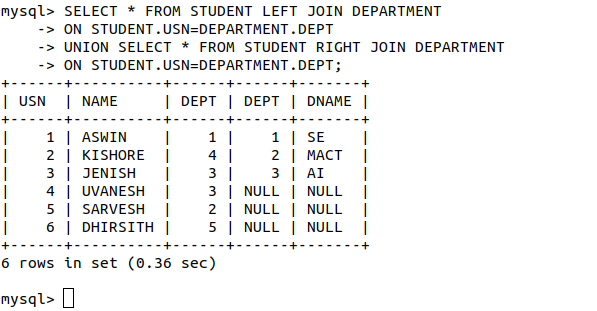
**Aim:** To see how the result is look like after using NATURAL and OUTER JOIN operation.

Consider the following two tables:

**SQL Queries :-**

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We don’t have Full Join in MySQL, so I’ve emulated using Left and Right Join with the help of Union.

**Result:** I have successfully executed the NATURAL JOIN, OUTER JOIN (left outer join, right outer join, full outer join[“Using left and right join”]) operations on two tables STUDENT table and DEPARTMENT table.