

Assignment No. 2

Assignment Title: SQL Queries:

Consider the given Database Schema: for problem statement 1

1. Dept (Deptno , Name , Location, Managerempid)
2. Employees (name, empid, address, city, dob, date_of_joining,gender, salary, deptno)
Gender must take value 'M' or 'F'.
3. Project(Projectid, title,city).
4. Works (empid , Projectid, total_hrs_worked);
5. Dependant(empid, name_of_dependant, age, relation)

Queries:

Enter password: *****

Welcome to the MySQL monitor. Commands end with ; or \g.

Your MySQL connection id is 29

Server version: 8.1.0 MySQL Community Server - GPL

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

```
mysql> USE TE_B_15;
```

```
Database changed
```

```
mysql> SHOW TABLES;
```

```
+-----+
```

```
| Tables_in_te_b_15 |
```

```
+-----+
```

```
| dept      |
```

```
| employees |
```

+-----+

2 rows in set (0.00 sec)

```
mysql> CREATE TABLE Project(Projectid int PRIMARY KEY, title varchar, city varchar);
```

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near ', city varchar)' at line 1

```
mysql> CREATE TABLE Project(Projectid int(3) PRIMARY KEY, title varchar(20), city varchar(20));
```

Query OK, 0 rows affected, 1 warning (0.14 sec)

```
mysql> CREATE TABLE Works(empid int FOREIGN KEY REFERENCES Employees(empid), Projectid int FOREIGN KEY REFERENCES Project(Projectid), total_hrs_worked int);
```

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'FOREIGN KEY REFERENCES Employees(empid), Projectid int FOREIGN KEY REFERENCES P' at line 1

```
mysql> CREATE TABLE Works(empid int, Projectid int, total_hrs_worked int);
```

Query OK, 0 rows affected (0.14 sec)

```
mysql> CREATE TABLE Dependant(empid int(3), name_of_department varchar(20), age int(2), relation varchar(20));
```

Query OK, 0 rows affected, 2 warnings (0.67 sec)

```
mysql> ALTER TABLE Dependant ADD FOREIGN KEY(empid) REFERENCES Employees(empid);
```

Query OK, 0 rows affected (0.28 sec)

Records: 0 Duplicates: 0 Warnings: 0

```
mysql> desc Dependant;
```

```
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| empid      | int       | YES  | MUL | NULL    |      |
| name_of_department | varchar(20) | YES  |     | NULL    |      |
| age        | int       | YES  |     | NULL    |      |
| relation   | varchar(20) | YES  |     | NULL    |      |
```

```
+-----+-----+-----+-----+-----+
```

4 rows in set (0.07 sec)

mysql> desc Project;

```
+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| Projectid | int | NO | PRI | NULL | |
| title | varchar(20) | YES | | NULL | |
| city | varchar(20) | YES | | NULL | |
+-----+-----+-----+-----+-----+
```

3 rows in set (0.00 sec)

mysql> desc Works;

```
+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| empid | int | YES | | NULL | |
| Projectid | int | YES | | NULL | |
| total_hrs_worked | int | YES | | NULL | |
+-----+-----+-----+-----+-----+
```

3 rows in set (0.00 sec)

mysql> ALTER TABLE Works ADD FOREIGN KEY(empid) REFERENCES Employees(empid);

Query OK, 0 rows affected (0.23 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> ALTER TABLE Works ADD FOREIGN KEY(Projectid) REFERENCES Project(Projectid);

Query OK, 0 rows affected (0.19 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> desc Works;

Field	Type	Null	Key	Default	Extra
empid	int	YES	MUL	NULL	
Projectid	int	YES	MUL	NULL	
total_hrs_worked	int	YES		NULL	

3 rows in set (0.00 sec)

mysql> select * from Dept;

Deptno	Name	Location	Managerempid
1	Development	Building 1	111
2	Testing	Building 2	112
3	Planning	Building 1	113

3 rows in set (0.00 sec)

mysql> desc Employees;

Field	Type	Null	Key	Default	Extra
name	varchar(20)	YES		NULL	
empid	int	NO	PRI	NULL	
address	varchar(30)	YES		NULL	
city	varchar(20)	YES		NULL	
dob	varchar(10)	YES		NULL	
date_of_joining	varchar(10)	YES		NULL	

gender	varchar(1)	YES		NULL		
salary	int	YES		NULL		
Deptno	int	YES	MUL	NULL		

+-----+-----+-----+-----+-----+-----+

9 rows in set (0.00 sec)

```
mysql> INSERT INTO Employees VALUES("Shraddha", 101, "Panchavati", "Nashik", "13/01/2001",
"17/01/2022", "F", 30000,1);
```

Query OK, 1 row affected (0.12 sec)

```
mysql> INSERT INTO Employees VALUES("Saish", 102, "Bandra", "Mumbai", "11/03/1999",
"24/07/2016", "M", 40000,2);
```

Query OK, 1 row affected (0.13 sec)

```
mysql> INSERT INTO Employees VALUES("Shreya", 103, "Borivali", "Mumbai", "01/09/2006",
"10/05/2023", "F", 15000,2);
```

Query OK, 1 row affected (0.13 sec)

```
mysql> SELECT * FROM Employees;
```

name	empid	address	city	dob	date_of_joining	gender	salary	Deptno
Shraddha	101	Panchavati	Nashik	13/01/2001	17/01/2022	F	30000	1
Saish	102	Bandra	Mumbai	11/03/1999	24/07/2016	M	40000	2
Shreya	103	Borivali	Mumbai	01/09/2006	10/05/2023	F	15000	2

3 rows in set (0.00 sec)

```
mysql> desc Project
```

-> ;

Field	Type	Null	Key	Default	Extra
-------	------	------	-----	---------	-------

Projectid	int	NO	PRI	NULL		
title	varchar(20)	YES		NULL		
city	varchar(20)	YES		NULL		

3 rows in set (0.00 sec)

```
mysql> INSERT INTO Project VALUES(001,"Banking Project","Pune");
```

Query OK, 1 row affected (0.08 sec)

```
mysql> INSERT INTO Project VALUES(002,"ERP System","Pune");
```

Query OK, 1 row affected (0.04 sec)

```
mysql> INSERT INTO Project VALUES(003,"Software Management","Mumbai");
```

Query OK, 1 row affected (0.02 sec)

```
mysql> INSERT INTO Project VALUES(004,"Testing Project","Bangalore");;
```

Query OK, 1 row affected (0.02 sec)

ERROR:

No query specified

```
mysql> SELECT * FROM Project;
```

Projectid	title	city	
1	Banking Project	Pune	
2	ERP System	Pune	
3	Software Management	Mumbai	
4	Testing Project	Bangalore	

4 rows in set (0.00 sec)

```
mysql> desc Works;
```

Field	Type	Null	Key	Default	Extra
empid	int	YES	MUL	NULL	
Projectid	int	YES	MUL	NULL	
total_hrs_worked	int	YES		NULL	

3 rows in set (0.00 sec)

```
mysql> INSERT INTO Works VALUES(101,001,6);
```

Query OK, 1 row affected (0.13 sec)

```
mysql> INSERT INTO Works VALUES(102,002,3);
```

Query OK, 1 row affected (0.12 sec)

```
mysql> INSERT INTO Works VALUES(103,003,5);
```

Query OK, 1 row affected (0.12 sec)

```
mysql> SELECT * FROM Works;
```

empid	Projectid	total_hrs_worked
101	1	6
102	2	3
103	3	5

3 rows in set (0.00 sec)

```
mysql> desc Dependant;
```

Field	Type	Null	Key	Default	Extra
empid	int	YES	MUL	NULL	
age	int	YES		NULL	
relation	varchar(20)	YES		NULL	
name_of_dependant	varchar(20)	YES		NULL	

```
4 rows in set (0.00 sec)
```

```
mysql> INSERT INTO Dependant VALUES(101,22,"Sarika","MOTHER");
```

```
Query OK, 1 row affected (0.13 sec)
```

```
mysql> INSERT INTO Dependant VALUES(102,25,"Rajesh","Father");
```

```
Query OK, 1 row affected (0.04 sec)
```

```
mysql> INSERT INTO Dependant VALUES(103,19,"Yash","Brother");
```

```
Query OK, 1 row affected (0.05 sec)
```

```
mysql> SELECT * FROM Dependant;;
```

empid	age	relation	name_of_dependant
101	22	Sarika	MOTHER
102	25	Rajesh	Father
103	19	Yash	Brother

```
3 rows in set (0.00 sec)
```



```
mysql> select * from Employees;
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+
| name   | empid | address | city  | dob      | date_of_joining | gender | salary | Deptno |
+-----+-----+-----+-----+-----+-----+-----+-----+
| Shraddha | 101 | Panchavati | Nashik | 13/01/2001 | 17/01/2022    | F     | 30000 | 1 |
| Saish   | 102 | Bandra    | Mumbai | 11/03/1999 | 24/07/2016    | M     | 40000 | 2 |
| Shreya  | 103 | Borivali  | Mumbai | 01/09/2006 | 10/05/2023    | F     | 15000 | 2 |
+-----+-----+-----+-----+-----+-----+-----+-----+
```

3 rows in set (0.00 sec)

```
mysql> ALTER TABLE Employees ADD COLUMN Mobile_No int(10);
```

Query OK, 0 rows affected, 1 warning (0.13 sec)

Records: 0 Duplicates: 0 Warnings: 1

```
mysql> INSERT INTO Employees(Mobile_No) values((7385597810),(8669014705),(7678008828));
```

ERROR 1136 (21S01): Column count doesn't match value count at row 1

```
mysql> select * from Employees;
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+
| name   | empid | address | city  | dob      | date_of_joining | gender | salary | Deptno |
Mobile_No |
+-----+-----+-----+-----+-----+-----+-----+-----+
| Shraddha | 101 | Panchavati | Nashik | 13/01/2001 | 17/01/2022    | F     | 30000 | 1 |
NULL |
| Saish   | 102 | Bandra    | Mumbai | 11/03/1999 | 24/07/2016    | M     | 40000 | 2 |
NULL |
| Shreya  | 103 | Borivali  | Mumbai | 01/09/2006 | 10/05/2023    | F     | 15000 | 2 |
NULL |
+-----+-----+-----+-----+-----+-----+-----+-----+
```

3 rows in set (0.00 sec)

```
mysql> INSERT INTO Employees(Mobile_No) values((7385597810),(8669014705),(7678008828));
```

ERROR 1136 (21S01): Column count doesn't match value count at row 1

```
mysql> desc Employees;
```

Field	Type	Null	Key	Default	Extra
name	varchar(20)	YES		NULL	
empid	int	NO	PRI	NULL	
address	varchar(30)	YES		NULL	
city	varchar(20)	YES		NULL	
dob	varchar(10)	YES		NULL	
date_of_joining	varchar(10)	YES		NULL	
gender	varchar(1)	YES		NULL	
salary	int	YES		NULL	
Deptno	int	YES	MUL	NULL	
Mobile_No	int	YES		NULL	

```
10 rows in set (0.00 sec)
```

```
mysql> ALTER TABLE Employees modify COLUMN Mobile_No int(10);
```

```
Query OK, 0 rows affected, 1 warning (0.05 sec)
```

```
Records: 0 Duplicates: 0 Warnings: 1
```

```
mysql> INSERT INTO Employees(Mobile_No) values((7385597810),(8669014705),(7678008828));
```

```
ERROR 1136 (21S01): Column count doesn't match value count at row 1
```

```
mysql> ALTER TABLE Employees modify COLUMN Mobile_No int(20);
```

```
Query OK, 0 rows affected, 1 warning (0.05 sec)
```

```
Records: 0 Duplicates: 0 Warnings: 1
```

```
mysql> INSERT INTO Employees(Mobile_No) values((7385597810),(8669014705),(7678008828));
```

```
ERROR 1136 (21S01): Column count doesn't match value count at row 1
```

```
mysql> ALTER TABLE Employees modify COLUMN Mobile_No bigint(10);
```

```
Query OK, 3 rows affected, 1 warning (0.23 sec)
```

Records: 3 Duplicates: 0 Warnings: 1

```
mysql> INSERT INTO Employees(Mobile_No) values((7385597810),(8669014705),(7678008828));
```

ERROR 1136 (21S01): Column count doesn't match value count at row 1

```
mysql> INSERT INTO Employees(Mobile_No) values(7385597810);
```

ERROR 1364 (HY000): Field 'empid' doesn't have a default value

```
mysql> INSERT INTO Employees(Mobile_No) values(7385597810) where empid=101;
```

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'where empid=101' at line 1

```
mysql> Update table Employees set Mobile_No=7385597810 where empid=101;
```

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'table Employees set Mobile_No=7385597810 where empid=101' at line 1

```
mysql> Update Employees set Mobile_No=7385597810 where empid=101;
```

Query OK, 1 row affected (0.03 sec)

Rows matched: 1 Changed: 1 Warnings: 0

```
mysql> select * from Employees;
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| name   | empid | address | city  | dob      | date_of_joining | gender | salary | Deptno |
Mobile_No |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Shraddha | 101 | Panchavati | Nashik | 13/01/2001 | 17/01/2022 | F | 30000 | 1 |
7385597810 |
| Saish | 102 | Bandra | Mumbai | 11/03/1999 | 24/07/2016 | M | 40000 | 2 |
NULL |
| Shreya | 103 | Borivali | Mumbai | 01/09/2006 | 10/05/2023 | F | 15000 | 2 |
NULL |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
```

3 rows in set (0.00 sec)

```
mysql> Update Employees set Mobile_No=8669014705 where empid=102;
```

Query OK, 1 row affected (0.13 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> Update Employees set Mobile_No=7678008828 where empid=103;

Query OK, 1 row affected (0.07 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql>

mysql> select * from employees;

name	empid	address	city	dob	date_of_joining	gender	salary	Deptno	Mobile_No
Shraddha	101	Panchavati	Nashik	13/01/2001	17/01/2022	F	30000	1	7385597810
Saish	102	Bandra	Mumbai	11/03/1999	24/07/2016	M	40000	2	8669014705
Shreya	103	Borivali	Mumbai	01/09/2006	10/05/2023	F	15000	2	7678008828

3 rows in set (0.00 sec)

mysql> select * from Project

-> ;

Projectid	title	city
1	Banking Project	Pune
2	ERP System	Pune
3	Software Management	Mumbai
4	Testing Project	Bangalore

4 rows in set (0.00 sec)

```
mysql> Delete from Project where title="Testing Project";
```

```
Query OK, 1 row affected (0.10 sec)
```

```
mysql> select * from Project;
```

```
+-----+-----+-----+
| Projectid | title          | city |
+-----+-----+-----+
| 1 | Banking Project | Pune |
| 2 | ERP System      | Pune |
| 3 | Software Management | Mumbai |
+-----+-----+-----+
```

```
3 rows in set (0.00 sec)
```

```
mysql> select * from Employees;
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| name   | empid | address | city | dob       | date_of_joining | gender | salary | Deptno |
Mobile_No |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Shraddha | 101 | Panchavati | Nashik | 13/01/2001 | 17/01/2022 | F | 30000 | 1 |
7385597810 |
| Saish | 102 | Bandra | Mumbai | 11/03/1999 | 24/07/2016 | M | 40000 | 2 |
8669014705 |
| Shreya | 103 | Borivali | Mumbai | 01/09/2006 | 10/05/2023 | F | 15000 | 2 |
7678008828 |
| Yash | 104 | Hinjewadi | Pune | 25/12/2004 | 08/02/2022 | M | 45000 | 3 |
7676354735 |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
```

```
4 rows in set (0.00 sec)
```

```
mysql> SELECT Name FROM Employees where Name like "S%";
```

```
+-----+
```

```
| Name |
+-----+
| Shraddha |
| Saish |
| Shreya |
+-----+
```

3 rows in set (0.06 sec)

```
mysql> SELECT * FROM Dept;
```

```
+-----+-----+-----+-----+
| Deptno | Name      | Location | Managerempid |
+-----+-----+-----+-----+
| 1 | Development | Building 1 | 111 |
| 2 | Testing    | Building 2 | 112 |
| 3 | Planning   | Building 1 | 113 |
+-----+-----+-----+-----+
```

3 rows in set (0.00 sec)

```
mysql> SELECT Name from Dept where Location="Building 1";
```

```
+-----+
| Name |
+-----+
| Development |
| Planning |
+-----+
```

2 rows in set (0.00 sec)

```
mysql> select * from Employees;
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
```

```
| name | empid | address | city | dob | date_of_joining | gender | salary | Deptno |
Mobile_No |
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Shraddha | 101 | Panchavati | Nashik | 13/01/2001 | 2022-01-17 | F | 30000 | 1 |
7385597810 |
| Saish | 102 | Bandra | Mumbai | 11/03/1999 | 2016-07-24 | M | 40000 | 2 |
8669014705 |
| Shreya | 103 | Borivali | Mumbai | 01/09/2006 | 2023-05-10 | F | 15000 | 2 |
7678008828 |
| Yash | 104 | Hinjewadi | Pune | 25/12/2004 | 2019-12-10 | M | 45000 | 3 |
7676354735 |
| Divya | 105 | Satpur | Nashik | 10/03/2002 | 2019-11-11 | F | 55000 | 3 |
9988332244 |
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM Employees where date_of_joining BETWEEN '01/01/2019' AND '01/01/2020';
Empty set (0.00 sec)
```

```
mysql> SELECT * FROM Employees where date_of_joining BETWEEN '2019-01-01' AND '2020-01-01';
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| name | empid | address | city | dob | date_of_joining | gender | salary | Deptno |
Mobile_No |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Yash | 104 | Hinjewadi | Pune | 25/12/2004 | 2019-12-10 | M | 45000 | 3 |
7676354735 |
| Divya | 105 | Satpur | Nashik | 10/03/2002 | 2019-11-11 | F | 55000 | 3 | 9988332244
|
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM Employees;
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
```

```
| name | empid | address | city | dob | date_of_joining | gender | salary | Deptno | Mobile_No |
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Shraddha | 101 | Panchavati | Nashik | 13/01/2001 | 2022-01-17 | F | 30000 | 1 | 7385597810 |
| Saish | 102 | Bandra | Mumbai | 11/03/1999 | 2016-07-24 | M | 40000 | 2 | 8669014705 |
| Shreya | 103 | Borivali | Mumbai | 01/09/2006 | 2023-05-10 | F | 15000 | 2 | 7678008828 |
| Yash | 104 | Hinjewadi | Pune | 25/12/2004 | 2019-12-10 | M | 45000 | 3 | 7676354735 |
| Divya | 105 | Satpur | Nashik | 10/03/2002 | 2019-11-11 | F | 55000 | 3 | 9988332244 |
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM Employees WHERE Salary > 50000;
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| name | empid | address | city | dob | date_of_joining | gender | salary | Deptno | Mobile_No |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Divya | 105 | Satpur | Nashik | 10/03/2002 | 2019-11-11 | F | 55000 | 3 | 9988332244 |
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

```
mysql>
```

```
mysql> SELECT * FROM Project;
```

```
+-----+-----+-----+
| Projectid | title | city |
+-----+-----+-----+
| 1 | Banking Project | Pune |
```


2	ERP System	Pune
3	Software Management	Mumbai

-----+

3 rows in set (0.00 sec)

mysql> SELECT * FROM Project WHERE city="Pune";

-----+

Projectid	title	city
-----------	-------	------

-----+

1	Banking Project	Pune
---	-----------------	------

2	ERP System	Pune
---	------------	------

-----+

2 rows in set (0.00 sec)

mysql> SELECT * FROM Dependant;

-----+

empid	age	relation	name_of_dependant
-------	-----	----------	-------------------

-----+

101	22	Sarika	MOTHER
-----	----	--------	--------

102	25	Rajesh	Father
-----	----	--------	--------

103	19	Yash	Brother
-----	----	------	---------

-----+

3 rows in set (0.01 sec)

mysql> SELECT name_of_dependant from Dependant where empid = 102;

-----+

name_of_dependant

-----+

Father

```
+-----+
1 row in set (0.00 sec)
```

```
mysql> SELECT * FROM Dependant;
```

```
+-----+-----+-----+-----+
| empid | age | relation | name_of_dependant |
+-----+-----+-----+-----+
| 101 | 22 | Sarika | MOTHER |
| 102 | 25 | Rajesh | Father |
| 103 | 19 | Yash | Brother |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> SELECT empid, age from Dependant;
```

```
+-----+-----+
| empid | age |
+-----+-----+
| 101 | 22 |
| 102 | 25 |
| 103 | 19 |
+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM Dependant ORDER BY age desc;
```

```
+-----+-----+-----+-----+
| empid | age | relation | name_of_dependant |
+-----+-----+-----+-----+
| 102 | 25 | Rajesh | Father |
| 101 | 22 | Sarika | MOTHER |
```

	103		19		Yash		Brother	
--	-----	--	----	--	------	--	---------	--

+	-----	+	-----	+	-----	+	-----	+
---	-------	---	-------	---	-------	---	-------	---

3 rows in set (0.00 sec)