

FAIZAN CHOUDHARY

20BCS021

DBMS LAB

21st February 2022

Creation:

- mysql> use 20bcs021_faizan;
- mysql> create table department2
-> (
-> dept_id int(5),
-> dept_name varchar(30)
->);
- mysql> insert into department2 values
-> (1, 'Information Technology'),
-> (2, 'Electrical'),
-> (3, 'Civil'),
-> (4, 'Mechanical'),
-> (5, 'Chemical');
- mysql> select * from department2;

```
mysql> select * from department2;
+-----+-----+
| dept_id | dept_name |
+-----+-----+
| 1 | Information Technology |
| 2 | Electrical |
| 3 | Civil |
| 4 | Mechanical |
| 5 | Chemical |
+-----+-----+
5 rows in set (0.00 sec)
```

- mysql> create table stud_member
-> (
-> roll_no int(5),
-> f_name varchar(15),
-> m_name varchar(15),
-> s_name varchar(15),
-> dept_id int(5),
-> semester int(1),

```

-> contact_no      int(11),
-> gender          char(2)
-> );

```

- mysql> insert into stud_member values

```

-> (1, 'Ankur', 'Samir', 'Kahar', 1, 1, 272121, 'M'),
-> (2, 'Dhaval', 'Dhiren', 'Joshi', 1, 1, 232122, 'M'),
-> (3, 'Ankita', 'Biren', 'Shah', 1, 1, 112121, 'F'),
-> (10, 'Komal', 'MaheshKumar', 'Pandya', 2, 3, 123123,
'F'),

-> (13, 'Amit', 'Jitenkumar', 'Mehta', 3, 3, 453667, 'M'),
-> (23, 'Jinal', 'Ashish', 'Gandhi', 2, 1, 323232, 'M'),
-> (22, 'Ganesh', 'Asha', 'Patel', 2, 3, 124244, 'M'),
-> (4, 'Shweta', 'Mihir', 'Patel', 3, 1, 646341, 'F'),
-> (7, 'Pooja', 'Mayaank', 'Desai', 3, 3, 328656, 'F'),
-> (8, 'Komal', 'Krishnaraj', 'Bhatia', 2, 3, 257422,
'F'),

-> (43, 'Kiran', 'Viraj', 'Shah', 1, 1, 754124, 'F');

```

- mysql> select * from stud_member;

```

mysql> select * from stud_member;
+-----+-----+-----+-----+-----+-----+-----+-----+
| roll_no | f_name | m_name | s_name | dept_id | semester | contact_no | gender |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | Ankur | Samir | Kahar | 1 | 1 | 272121 | M |
| 2 | Dhaval | Dhiren | Joshi | 1 | 1 | 232122 | M |
| 3 | Ankita | Biren | Shah | 1 | 1 | 112121 | F |
| 10 | Komal | MaheshKumar | Pandya | 2 | 3 | 123123 | F |
| 13 | Amit | Jitenkumar | Mehta | 3 | 3 | 453667 | M |
| 23 | Jinal | Ashish | Gandhi | 2 | 1 | 323232 | M |
| 22 | Ganesh | Asha | Patel | 2 | 3 | 124244 | M |
| 4 | Shweta | Mihir | Patel | 3 | 1 | 646341 | F |
| 7 | Pooja | Mayaank | Desai | 3 | 3 | 328656 | F |
| 8 | Komal | Krishnaraj | Bhatia | 2 | 3 | 257422 | F |
| 43 | Kiran | Viraj | Shah | 1 | 1 | 754124 | F |
+-----+-----+-----+-----+-----+-----+-----+-----+
11 rows in set (0.00 sec)

```

Queries:

1. Display the names and contact numbers of all student members.

```
mysql> select f_name, m_name, s_name, contact_no  
-> from stud_member;
```

OUTPUT:

f_name	m_name	s_name	contact_no
Ankur	Samir	Kahar	272121
Dhaval	Dhiren	Joshi	232122
Ankita	Biren	Shah	112121
Komal	MaheshKumar	Pandya	123123
Amit	Jitenkumar	Mehta	453667
Jinal	Ashish	Gandhi	323232
Ganesh	Asha	Patel	124244
Shweta	Mihir	Patel	646341
Pooja	Mayaank	Desai	328656
Komal	Krishnaraj	Bhatia	257422
Kiran	Viraj	Shah	754124

11 rows in set (0.00 sec)

2. Give the names and roll number of all students of Information Technology who are the members.

```
mysql> select roll_no, f_name, m_name, s_name  
-> from stud_member, department2  
-> where stud_member.dept_id = department2.dept_id and  
stud_member.dept_id = 1;
```

OUTPUT:

roll_no	f_name	m_name	s_name
1	Ankur	Samir	Kahar
2	Dhaval	Dhiren	Joshi
3	Ankita	Biren	Shah
43	Kiran	Viraj	Shah

4 rows in set (0.00 sec)

3. Display names of Departments whose students are members.

```
mysql> select dept_name  
-> from department2  
-> where department2.dept_id in (select dept_id from  
stud_member);
```

OUTPUT:

```
+-----+
| dept_name |
+-----+
| Information Technology |
| Electrical          |
| Civil              |
+-----+
3 rows in set (0.00 sec)
```

4. Display names of Departments for which no student are members.

```
mysql> select dept_name
-> from department2
-> where department2.dept_id not in (select dept_id from
stud_member);
```

OUTPUT:

```
+-----+
| dept_name |
+-----+
| Mechanical |
| Chemical   |
+-----+
2 rows in set (0.00 sec)
```

5. Display names of all Departments.

```
mysql> select dept_name
-> from department2;
```

OUTPUT:

```
+-----+
| dept_name |
+-----+
| Information Technology |
| Electrical          |
| Civil              |
| Mechanical          |
| Chemical            |
+-----+
5 rows in set (0.00 sec)
```

6. Find the number of students of Electrical Department who are members.

```
mysql> select count(*)
-> from stud_member, department2
-> where stud_member.dept_id = department2.dept_id and
department2.dept_name = "Electrical";
```

OUTPUT:

```

+-----+
| count(*) |
+-----+
|         4 |
+-----+
1 row in set (0.01 sec)

```

7. Display information of student members whose name begins with the letter 'A'.

```

mysql> select *
      -> from stud_member
      -> where f_name like 'A%';

```

OUTPUT:

```

+-----+-----+-----+-----+-----+-----+-----+-----+
| roll_no | f_name | m_name | s_name | dept_id | semester | contact_no | gender |
+-----+-----+-----+-----+-----+-----+-----+-----+
|        1 | Ankur  | Samir  | Kahar  |        1 |        1 |    272121 | M      |
|        3 | Ankita | Biren  | Shah   |        1 |        1 |    112121 | F      |
|       13 | Amit   | Jitenkumar | Mehta |        3 |        3 |    453667 | M      |
+-----+-----+-----+-----+-----+-----+-----+-----+
3 rows in set (0.01 sec)

```

8. Display all details of Male members only.

```

mysql> select *
      -> from stud_member
      -> where gender = 'M';

```

OUTPUT:

```

+-----+-----+-----+-----+-----+-----+-----+-----+
| roll_no | f_name | m_name | s_name | dept_id | semester | contact_no | gender |
+-----+-----+-----+-----+-----+-----+-----+-----+
|        1 | Ankur  | Samir  | Kahar  |        1 |        1 |    272121 | M      |
|        2 | Dhaval | Dhiren | Joshi   |        1 |        1 |    232122 | M      |
|       13 | Amit   | Jitenkumar | Mehta |        3 |        3 |    453667 | M      |
|       23 | Jinal  | Ashish | Gandhi  |        2 |        1 |    323232 | M      |
|       22 | Ganesh | Asha   | Patel   |        2 |        3 |    124244 | M      |
+-----+-----+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

```

9. Display data of student members who are currently in semester 3.

```

mysql> select *
      -> from stud_member
      -> where semester = 3;

```

OUTPUT:

```

+-----+-----+-----+-----+-----+-----+-----+-----+
| roll_no | f_name | m_name | s_name | dept_id | semester | contact_no | gender |
+-----+-----+-----+-----+-----+-----+-----+-----+
|       10 | Komal  | MaheshKumar | Pandya |        2 |        3 |    123123 | F      |
|       13 | Amit   | Jitenkumar | Mehta   |        3 |        3 |    453667 | M      |
|       22 | Ganesh | Asha   | Patel   |        2 |        3 |    124244 | M      |
|        7 | Pooja  | Mayaank | Desai   |        3 |        3 |    328656 | F      |
|        8 | Komal  | Krishnaraj | Bhatia  |        2 |        3 |    257422 | F      |
+-----+-----+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

```

10. Display data of student female members in alphabetical order.

```
mysql> select *  
      -> from stud_member  
      -> where gender = 'F'  
      -> order by f_name;
```

OUTPUT:

roll_no	f_name	m_name	s_name	dept_id	semester	contact_no	gender
3	Ankita	Biren	Shah	1	1	112121	F
43	Kiran	Viraj	Shah	1	1	754124	F
10	Komal	MaheshKumar	Pandya	2	3	123123	F
8	Komal	Krishnaraj	Bhatia	2	3	257422	F
7	Pooja	Mayaank	Desai	3	3	328656	F
4	Shweta	Mihir	Patel	3	1	646341	F

6 rows in set (0.00 sec)