

1. Find the courses which have taken by students

Ans)

```
mysql> select * from course;
```

courseno	coursedes	coursetype	semno	hallno	facno
c1	dhms	c	2	3	f1
c2	ds	c	1	4	f2
c3	networks	c	3	5	f2
c4	os	c	1	NULL	f3

4 rows in set (0.00 sec)

```
mysql> select * from student;
```

regno	name	gender	dob	mobilen	city	courseno	minscore	maxscore	avgscore	sumscore
123	bino	m	2022-09-08	1234567891	chennai	c1	50	95	60	352
124	reshma	f	2012-09-08	789345671	hyderabad	c2	65	79	72	NULL
125	arshiya	f	2003-09-08	549345671	banglore	c2	65	79	72	NULL
126	rakath	m	2004-04-21	917781602	kadapa	c1	50	95	60	NULL

4 rows in set (0.00 sec)

```
mysql> select courseno from course where exists(select regno from student where course.courseno=student.courseno);
```

courseno
c1
c2

2 rows in set (0.00 sec)

```
mysql> select distinct(courseno) from course;
```

courseno
c1
c2
c3
c4

4 rows in set (0.00 sec)

2. Find the Faculties to whom courses are assigned

Ans)

```
mysql> select * from faculty;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| facno | facname | gender | dob       | doj       | mobileno | deptno | avgsalary | salary |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| f1    | kalai   | f      | 1997-06-03 | 2022-03-04 | 222345526 | d1     | 15008    | 9268   |
| f2    | kamu    | m      | 1995-06-03 | 2021-06-04 | 222345546 | d2     | 28000    | NULL   |
| f3    | murugan | m      | 1999-06-03 | 2021-06-08 | 242345546 | d1     | 38700    | 8298   |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> select * from course;
+-----+-----+-----+-----+-----+-----+
| courseno | coursedesc | coursetype | semno | hallno | facno |
+-----+-----+-----+-----+-----+-----+
| c1       | dbms       | c          | 2     | 3      | f1     |
| c2       | ds         | c          | 1     | 4      | f2     |
| c3       | networks   | c          | 3     | 5      | f2     |
| c4       | os         | c          | 1     | NULL   | f3     |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> select facno from faculty where facno =any(select facno from course);
+-----+
| facno |
+-----+
| f1     |
| f2     |
| f3     |
+-----+
3 rows in set (0.00 sec)
```

3. Find the d1 dept employees whose salary is greater than all the d2 dept employees salaries

Ans)

```
mysql> select * from faculty;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| facno | facname | gender | dob       | doj       | mobileno | deptno | avgsalary | salary |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| f1    | kalai   | f      | 1997-06-03 | 2022-03-04 | 222345526 | d1     | 15008    | 9268   |
| f2    | kamu    | m      | 1995-06-03 | 2021-06-04 | 222345546 | d2     | 28000    | NULL   |
| f3    | murugan | m      | 1999-06-03 | 2021-06-08 | 242345546 | d1     | 38700    | 8298   |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> select facno from faculty where salary >all (select salary from faculty where deptno='d2');
Empty set (0.01 sec)

mysql> select facno from faculty where avgsalary >all (select avgsalary from faculty where deptno='d2');
+-----+
| facno |
+-----+
| f3     |
+-----+
1 row in set (0.00 sec)
```