

1. Create the database named CYBERCOLLEGE and the above tables in the CYBERCOLLEGE database; include the Primary Key Constraint, Referential Integrity Constraints, and Check Constraints.

```
mysql> create database cybercollege;
Query OK, 1 row affected (0.01 sec)

mysql> use cybercollege;
Database changed
mysql> create table student(stu_no varchar(9) primary key,stu_fname varchar(20),stu_lname varchar(30),stu_address varchar(50),stu_city varchar(30),state varchar(2),postalcode varchar(9));
Query OK, 0 rows affected (0.05 sec)

mysql> desc student;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| stu_no | varchar(9) | NO | PRI | NULL | |
| stu_fname | varchar(20) | YES | | NULL | |
| stu_lname | varchar(30) | YES | | NULL | |
| stu_address | varchar(50) | YES | | NULL | |
| stu_city | varchar(30) | YES | | NULL | |
| state | varchar(2) | YES | | NULL | |
| postalcode | varchar(9) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
7 rows in set (0.02 sec)

mysql> create table instructor(inst_id varchar(5) primary key,inst_fname varchar(20),inst_lname varchar(30),inst_phn varchar(8));
Query OK, 0 rows affected (0.02 sec)

mysql> desc instructor;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| inst_id | varchar(5) | NO | PRI | NULL | |
| inst_fname | varchar(20) | YES | | NULL | |
| inst_lname | varchar(30) | YES | | NULL | |
| inst_phn | varchar(8) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
mysql> create table course(course_code varchar(6) primary key,course_title varchar(25),course_hour number(2,0),semester varchar(20));
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 'number(2,0),semester varchar(20))' at line 1
mysql> create table course(course_code varchar(6) primary key,course_title varchar(25),course_hour numeric(2,0),semester varchar(20));
Query OK, 0 rows affected (0.03 sec)

mysql> desc course;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| course_code | varchar(6) | NO | PRI | NULL | |
| course_title | varchar(25) | YES | | NULL | |
| course_hour | decimal(2,0) | YES | | NULL | |
| semester | varchar(20) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.01 sec)

mysql> create table section(section_id numeric primary key,time_offered varchar(10),day_offered varchar(10),section_room varchar(8),class_size numeric(3,0) check(class_size >=0),number_enrolled numeric(3,0) check(number_enrolled >=0),inst_id char(5) references instructor(inst_id),course_code varchar(6) references course(course_code));
Query OK, 0 rows affected (0.03 sec)

mysql> desc section;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| section_id | decimal(10,0) | NO | PRI | NULL | |
| time_offered | varchar(10) | YES | | NULL | |
| day_offered | varchar(10) | YES | | NULL | |
| section_room | varchar(8) | YES | | NULL | |
| class_size | decimal(3,0) | YES | | NULL | |
| number_enrolled | decimal(3,0) | YES | | NULL | |
| inst_id | char(5) | YES | | NULL | |
| course_code | varchar(6) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
8 rows in set (0.01 sec)
```

```
mysql> create table enrolment(stu_no varchar(9) references student(stu_no),section_id varchar(7) references section(section_id),grade varchar(2));
Query OK, 0 rows affected (0.02 sec)

mysql> desc enrolment;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| stu_no | varchar(9) | YES | | NULL | |
| section_id | varchar(7) | YES | | NULL | |
| grade | varchar(2) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.01 sec)
```

2. Add a field Country to the STUDENT table with the default value set to 'India'.

```
mysql> alter table student add country varchar(20) default 'India';
Query OK, 0 rows affected (0.06 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> desc student;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| stu_no     | varchar(9)    | NO   | PRI | NULL    |       |
| stu_fname  | varchar(20)   | YES  |     | NULL    |       |
| stu_lname  | varchar(30)   | YES  |     | NULL    |       |
| stu_address | varchar(50)   | YES  |     | NULL    |       |
| stu_city   | varchar(30)   | YES  |     | NULL    |       |
| state      | varchar(2)    | YES  |     | NULL    |       |
| postalcode | varchar(9)    | YES  |     | NULL    |       |
| country    | varchar(20)   | YES  |     | India   |       |
+-----+-----+-----+-----+-----+-----+
8 rows in set (0.00 sec)
```

3. Add a constraint to the Grade field in the ENROLMENT table that accepts only the values A,B,C, and 'D'.

```
mysql> alter table enrolment add constraint grade_check check(grade in ('A','B','C'));
Query OK, 0 rows affected (0.01 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

4. Modify the ENROLMENT table by changing the width of the field Grade to 1

```
mysql> alter table enrolment modify grade varchar(1);
Query OK, 0 rows affected (0.05 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> desc enrolment;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| stu_no     | varchar(9)    | YES  |     | NULL    |       |
| section_id | varchar(7)    | YES  |     | NULL    |       |
| grade      | varchar(1)    | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

5. Add a new column, salary to the INSTRUCTOR table and display its modified schema.

```
mysql> alter table instructor add salary varchar(10);
Query OK, 0 rows affected (0.04 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> desc instructor;
```

Field	Type	Null	Key	Default	Extra
inst_id	varchar(5)	NO	PRI	NULL	
inst_fname	varchar(20)	YES		NULL	
inst_lname	varchar(30)	YES		NULL	
inst_phn	varchar(8)	YES		NULL	
salary	varchar(10)	YES		NULL	

5 rows in set (0.00 sec)

6. Drop the column Country from the STUDENT table.

```
mysql> alter table student drop column country;
Query OK, 0 rows affected (0.04 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> desc student;
```

Field	Type	Null	Key	Default	Extra
stu_no	varchar(9)	NO	PRI	NULL	
stu_fname	varchar(20)	YES		NULL	
stu_lname	varchar(30)	YES		NULL	
stu_address	varchar(50)	YES		NULL	
stu_city	varchar(30)	YES		NULL	
state	varchar(2)	YES		NULL	
postalcode	varchar(9)	YES		NULL	

7 rows in set (0.00 sec)

7. Create a view for instructor to display the course taught by an instructor .Display the personal details but by hiding the salary information.

```
mysql> create view instit as select i.inst_id,i.inst_fname,i.inst_phn,c.course_title from instructor i join course c join section s where i.inst_id=s.inst_id and s.course_code=c.course_code;
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> select * from instit;
```

inst_id	inst_fname	inst_phn	course_title
202	Ashna	98112321	AI

1 row in set (0.00 sec)

```
mysql>
```

8. Insert details of you and your 5 friends in STUDENT table and the details of 5 instructors with names (Asha, Ashna, Sandeep, Asifa, George) in INSTRUCTOR table.

```
mysql> insert into student values('101','Ammu','Joy','Ammu villa','Thrissur','K','680011');
Query OK, 1 row affected (0.02 sec)

mysql> insert into student values('102','Binu','Babu','Binu villa','Ernamkulam','K','680012');
Query OK, 1 row affected (0.00 sec)

mysql> insert into student values('103','Celin','Anto','Celin villa','Malapuram','K','680013');
Query OK, 1 row affected (0.00 sec)

mysql> insert into student values('104','Dona','Jose','Dona villa','Thrissur','K','680014');
Query OK, 1 row affected (0.00 sec)

mysql> insert into student values('105','Elna','Joseph','Elna villa','Ernamkulam','K','680015');
Query OK, 1 row affected (0.01 sec)

mysql> select * from student;
+-----+-----+-----+-----+-----+-----+
| stu_no | stu_fname | stu_lname | stu_address | stu_city | state | postalcode |
+-----+-----+-----+-----+-----+-----+
| 101    | Ammu     | Joy      | Ammu villa  | Thrissur | K     | 680011     |
| 102    | Binu     | Babu     | Binu villa  | Ernamkulam | K     | 680012     |
| 103    | Celin    | Anto     | Celin villa | Malapuram | K     | 680013     |
| 104    | Dona     | Jose     | Dona villa  | Thrissur | K     | 680014     |
| 105    | Elna     | Joseph   | Elna villa  | Ernamkulam | K     | 680015     |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.01 sec)
```

```
mysql> insert into instructor values('201','Asha','Job','98005678','20000');
Query OK, 1 row affected (0.00 sec)

mysql> insert into instructor values('202','Ashna','M A','98112321','25000');
Query OK, 1 row affected (0.00 sec)

mysql> insert into instructor values('203','Sandeep','V P','98113321','15000');
Query OK, 1 row affected (0.00 sec)

mysql> insert into instructor values('204','Asifa','Fathima','98110000','23500');
Query OK, 1 row affected (0.01 sec)

mysql> insert into instructor values('205','George','Varghese','98110440','25000');
Query OK, 1 row affected (0.00 sec)

mysql> select * from instructor;
+-----+-----+-----+-----+-----+
| inst_id | inst_fname | inst_lname | inst_phn | salary |
+-----+-----+-----+-----+-----+
| 201     | Asha      | Job       | 98005678 | 20000  |
| 202     | Ashna     | M A       | 98112321 | 25000  |
| 203     | Sandeep   | V P       | 98113321 | 15000  |
| 204     | Asifa     | Fathima   | 98110000 | 23500  |
| 205     | George    | Varghese  | 98110440 | 25000  |
+-----+-----+-----+-----+-----+
5 rows in set (0.01 sec)
```

9. Add details of the first and second semester courses. Also add a new course for Data Mining with a course code of 20MCA260 worth with credit of 4 hours


```
mysql> insert into course values('20MCA101','MFCS',4,'1');
ERROR 1406 (22001): Data too long for column 'course_code' at row
mysql> alter table course modify course_code varchar(10);
Query OK, 0 rows affected (0.03 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> insert into course values('20MCA101','MFCS',4,'1');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into course values('20MCA102','ADS',3,'1');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into course values('20MCA103','DIGITAL',3,'1');
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into course values('20MCA104','ASE',5,'1');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into course values('20MCA201','ADBMS',4,'2');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into course values('20MCA202','ACN',4,'2');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into course values('20MCA203','AOS',2,'2');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into course values('20MCA204','AI',3,'2');
Query OK, 1 row affected (0.01 sec)
```

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

course_code	course_title	course_hour	semester
20MCA101	MFCS	4	1
20MCA102	ADS	3	1
20MCA103	DIGITAL	3	1
20MCA104	ASE	5	1
20MCA201	ADBMS	4	2
20MCA202	ACN	4	2
20MCA203	AOS	2	2
20MCA204	AI	3	2

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

```
mysql> insert into course values('20MCA260','DATA MINING',4,'2');
Query OK, 1 row affected (0.01 sec)
```

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

course_code	course_title	course_hour	semester
20MCA101	MFCS	4	1
20MCA102	ADS	3	1
20MCA103	DIGITAL	3	1
20MCA104	ASE	5	1
20MCA201	ADBMS	4	2
20MCA202	ACN	4	2
20MCA203	AOS	2	2
20MCA204	AI	3	2
20MCA260	DATA MINING	4	2

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

10. Add a new section for this new course with section ID as 301. The section should meet in 2-4 on MW in BLGNG102. The class size should be 35, and number enrolled should be 0. The instructor should be 3, and the course is 20MCA260. Also add sections 302 and 303 for the courses AOS and OB and enrol 5 students each to these courses.

```
mysql> insert into section values(301,'2-4','MW','BLGNG102',35,0,'3','20MCA260');
Query OK, 1 row affected (0.00 sec)

mysql> insert into section values(302,'2-5','MW','BLGNG102',35,5,'201','20MCA203');
Query OK, 1 row affected (0.02 sec)

mysql> insert into section values(303,'2-4','MTh','BLGNG102',35,5,'202','20MCA204');
Query OK, 1 row affected (0.00 sec)

mysql> select * from section;
```

section_id	time_offered	day_offered	section_room	class_size	number_enrolled	inst_id	course_code
301	2-4	MW	BLGNG102	35	0	3	20MCA260
302	2-5	MW	BLGNG102	35	5	201	20MCA203
303	2-4	MTh	BLGNG102	35	5	202	20MCA204

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

11. Register yourself along with your 3 friends for this new course by adding a row to the ENROLMENT table. The grade should be null.

```
mysql> insert into enrolment values('101',301,' ');
Query OK, 1 row affected (0.00 sec)

mysql> insert into enrolment values('102',301,' ');
Query OK, 1 row affected (0.00 sec)

mysql> insert into enrolment values('103',301,' ');
Query OK, 1 row affected (0.00 sec)

mysql> insert into enrolment values('104',301,' ');
Query OK, 1 row affected (0.00 sec)

mysql> select * from enrolment;
```

stu_no	section_id	grade
101	301	
102	301	
103	301	
104	301	

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

12. Update the 301 section, and increase the class sizes by 10%.

```
mysql> update section set class_size=class_size+(class_size*10/100) where section_id=301;
Query OK, 1 row affected, 1 warning (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 1

mysql> select * from section;
+-----+-----+-----+-----+-----+-----+-----+-----+
| section_id | time_offered | day_offered | section_room | class_size | number_enrolled | inst_id | course_code |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 301 | 2-4 | MW | BLGNG102 | 39 | 0 | 3 | 20MCA260 |
| 302 | 2-5 | MW | BLGNG102 | 35 | 5 | 201 | 20MCA203 |
| 303 | 2-4 | MTh | BLGNG102 | 35 | 5 | 202 | 20MCA204 |
+-----+-----+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

13. Give a 10% increment in salary for all instructors.

```
mysql> update instructor set salary=salary+(salary*10/100);
Query OK, 5 rows affected (0.01 sec)
Rows matched: 5 Changed: 5 Warnings: 0

mysql> select * from instructor;
+-----+-----+-----+-----+-----+
| inst_id | inst_fname | inst_lname | inst_phn | salary |
+-----+-----+-----+-----+-----+
| 201 | Asha | Job | 98005678 | 22000 |
| 202 | Ashna | M A | 98112321 | 27500 |
| 203 | Sandeep | V P | 98113321 | 16500 |
| 204 | Asifa | Fathima | 98110000 | 25850 |
| 205 | George | Varghese | 98110440 | 27500 |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

14. Delete Section 302 and verify for the rows in ENROLMENT table for that section.

```
mysql> delete from section where section_id=302;
Query OK, 1 row affected (0.00 sec)

mysql> select * from section;
+-----+-----+-----+-----+-----+-----+-----+-----+
| section_id | time_offered | day_offered | section_room | class_size | number_enrolled | inst_id | course_code |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 301 | 2-4 | MW | BLGNG102 | 39 | 0 | 3 | 20MCA260 |
| 303 | 2-4 | MTh | BLGNG102 | 35 | 5 | 202 | 20MCA204 |
+-----+-----+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

15. Undo the previous delete operation

```
mysql> rollback;
Query OK, 0 rows affected (0.00 sec)

mysql>
```

16. Save all the transactions to the database.

```
mysql> commit;
Query OK, 0 rows affected (0.00 sec)

mysql>
```

17. Grant the privilege to read and delete from the ENROLMENT table to the User U1.

```
mysql> CREATE USER 'U1' IDENTIFIED BY '12345678';
Query OK, 0 rows affected (0.03 sec)

mysql> select user from mysql.user;
+-----+
| user |
+-----+
| U1    |
| user  |
| mysql.session |
| mysql.sys |
| root  |
+-----+
5 rows in set (0.01 sec)

mysql> grant select,update on enrolment to U1;
Query OK, 0 rows affected (0.00 sec)

mysql> show grants for 'U1';
+-----+
| Grants for U1@% |
+-----+
| GRANT USAGE ON *.* TO 'U1'@'%' |
| GRANT SELECT, UPDATE ON `cybercollege`.`enrolment` TO 'U1'@'%' |
+-----+
2 rows in set (0.00 sec)

mysql>
```

18. Revoke the delete privilege from U1

```
mysql> REVOKE delete ON enrolment from U1;
Query OK, 0 rows affected (0.00 sec)

mysql> show grants for 'U1';
+-----+
| Grants for U1@% |
+-----+
| GRANT USAGE ON *.* TO 'U1'@'%' |
| GRANT SELECT, UPDATE ON `cybercollege`.`enrolment` TO 'U1'@'%' |
+-----+
2 rows in set (0.00 sec)

mysql>
```

19. Display the full name and contact details of students living in Kochi.

```
mysql> select stu_fname,stu_lname,stu_address from student where stu_city='kochi';
Empty set (0.01 sec)

mysql>
```

20. List the student details who has longest first name


```
mysql> select * from student where length(stu_fname)=(select max(length(stu_fname))from student);
+-----+-----+-----+-----+-----+-----+-----+
| stu_no | stu_fname | stu_lname | stu_address | stu_city | state | postalcode |
+-----+-----+-----+-----+-----+-----+-----+
| 103    | Celin    | Anto     | Celin villa | Malapuram | K     | 680013    |
+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.01 sec)

mysql>
```

21. Display the name and phone number of the instructors who is handling the courses AOS and ADBMS.

```
mysql> select inst_fname,inst_phn from instructor i join course c join section s where i.inst_id=s.inst_id and s.course_
code=c.course_code and c.course_title='AOS' or 'ADBMS';
+-----+-----+
| inst_fname | inst_phn |
+-----+-----+
| Asha      | 98005678 |
+-----+-----+
1 row in set, 1 warning (0.00 sec)

mysql>
```

22. List the codes, titles, and credit hours for courses worth 4 hours. Order the results in descending order of course code.

```
mysql> select course_code,course_title,course_hour from course where course_hour=4 order by course_code desc;
+-----+-----+-----+
| course_code | course_title | course_hour |
+-----+-----+-----+
| 20MCA260    | DATA MINING | 4           |
| 20MCA202    | ACN          | 4           |
| 20MCA201    | ADBMS        | 4           |
| 20MCA101    | MFCS         | 4           |
+-----+-----+-----+
4 rows in set (0.00 sec)

mysql>
```

23. Display the names of the students in the descending order along with their phone number.

```
mysql> select stu_fname,stu_lname from student order by stu_fname desc;
+-----+-----+
| stu_fname | stu_lname |
+-----+-----+
| Elna      | Joseph    |
| Dona      | Jose      |
| Celin     | Anto      |
| Binu      | Babu      |
| Ammu      | Joy       |
+-----+-----+
5 rows in set (0.00 sec)

mysql>
```

24. List the student's name, course code, and section id grouping the students by their grade.

```
mysql> select student.stu_fname,student.stu_lname,section.course_code,enrolment.section_id from student inner join section
on inner join enrolment on student.stu_no=enrolment.stu_no and section.section_id=enrolment.section_id group by enrolment
t.grade;
+-----+-----+-----+-----+
| stu_fname | stu_lname | course_code | section_id |
+-----+-----+-----+-----+
| Ammu      | Joy       | 20MCA260    | 301        |
+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql>
```

25. Use an inner join between the STUDENT and ENROLMENT tables for showing the full name, Section id and Grade.

```
mysql> select student.stu_fname,student.stu_lname,enrolment.section_id,enrolment.grade from student inner join enrolment
on student.stu_no=enrolment.stu_no;
+-----+-----+-----+-----+
| stu_fname | stu_lname | section_id | grade |
+-----+-----+-----+-----+
| Ammu      | Joy       | 301        |       |
| Binu      | Babu      | 301        |       |
| Celin     | Anto      | 301        |       |
| Dona      | Jose      | 301        |       |
| Elna      | Joseph    | 302        |       |
+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql>
```

26. Use an outer join between the STUDENT and ENROLMENT tables for showing the full name, Section id and Grade. Include all the students regardless of whether they have a matching section.

```
mysql> select student.stu_fname,student.stu_lname,enrolment.section_id,enrolment.grade from student left join enrolment
on student.stu_no=enrolment.stu_no;
+-----+-----+-----+-----+
| stu_fname | stu_lname | section_id | grade |
+-----+-----+-----+-----+
| Ammu      | Joy       | 301        |       |
| Binu      | Babu      | 301        |       |
| Celin     | Anto      | 301        |       |
| Dona      | Jose      | 301        |       |
| Elna      | Joseph    | 302        |       |
+-----+-----+-----+-----+
5 rows in set (0.01 sec)

mysql>
```

27. Give a 7% salary raise to instructors whose salary is less than the average.

```
mysql> update instructor set salary=salary+(salary*7/100) where salary<(select avg(salary));
Query OK, 0 rows affected (0.00 sec)
Rows matched: 0 Changed: 0 Warnings: 0
```

```
mysql> select * from instructor;
+-----+-----+-----+-----+-----+
| inst_id | inst_fname | inst_lname | inst_phn | salary |
+-----+-----+-----+-----+-----+
| 201     | Asha      | Job       | 98005678 | 22000  |
| 202     | Ashna     | M A       | 98112321 | 27500  |
| 203     | Sandeep   | V P       | 98113321 | 16500  |
| 204     | Asifa     | Fathima   | 98110000 | 25850  |
| 205     | George    | Varghese  | 98110440 | 27500  |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

```
mysql>
```

28. List full name and salary of instructors whose last name ends with 'a' and earns highest salary.

```
mysql> select inst_fname,salary from instructor where salary=(select max(salary) from instructor) and inst_fname in(select inst_fname from instructor where inst_fname like '%a');
+-----+-----+
| inst_fname | salary |
+-----+-----+
| Ashna     | 27500  |
+-----+-----+
1 row in set (0.00 sec)

mysql>
```

29. Display the details of instructor who draws lowest salary.

```
mysql> select * from instructor where salary=(select min(salary)from instructor);
+-----+-----+-----+-----+-----+
| inst_id | inst_fname | inst_lname | inst_phn | salary |
+-----+-----+-----+-----+-----+
| 203     | Sandeep   | V P       | 98113321 | 16500  |
+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql>
```

30. List the student's detail who lived in Kochi, Kerala or in Bangalore, Karnataka or both.

```
mysql> select * from student where stu_city='kochi' and 'kerala' or 'bangalor' and 'karnadaka' or stu_city in('kochi','kerala','bangalor','karnadaka');
Empty set, 2 warnings (0.00 sec)

mysql>
```