```
mysql> CREATE DATABASE bca_satish;
Query OK, 1 row affected (0.15 sec)
```

```
mysql> CREATE DATABASE bca077_satish;
Query OK, 1 row affected (0.10 sec)
```

```
mysql> SHOW DATABASES;
+----------------------------+
| Database                   |
+----------------------------+
| bca077_satish              |
| bca_satish                 |
| db_ncit_bca_2077_wordpress |
| information_schema         |
| lab_crud                   |
| mysql                      |
| performance_schema         |
| sakila                     |
| sys                        |
| world                      |
+----------------------------+
10 rows in set (0.16 sec)
```

```
mysql> DROP DATABASE bca077_satish;
Query OK, 0 rows affected (0.35 sec)
```

```
mysql> USE bca_satish;
Database changed
```

```
mysql> show tables;
+---------------------+
| Tables_in_bca_satish |
+---------------------+
| advisor             |
| department          |
| inst_dept           |
| instructor          |
| student             |
+---------------------+
5 rows in set (0.14 sec)

mysql> desc department;
+-----------+---------------+------+-----+---------+-------+
| Field     | Type          | Null | Key | Default | Extra |
+-----------+---------------+------+-----+---------+-------+
| dept_name | varchar(30)   | NO   | PRI | NULL    |       |
| building  | varchar(20)   | NO   |     | NULL    |       |
| budget    | decimal(10,2) | YES  |     | NULL    |       |
+-----------+---------------+------+-----+---------+-------+
3 rows in set (0.26 sec)
```

```
mysql> ALTER TABLE student add FOREIGN KEY(dept_name) REFERENCES department(dept_name);
Query OK, 0 rows affected (0.76 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> desc student;
+-----------+-------------+------+-----+---------+----------------+
| Field     | Type        | Null | Key | Default | Extra          |
+-----------+-------------+------+-----+---------+----------------+
| id        | int         | NO   | PRI | NULL    | auto_increment |
| name      | varchar(20) | NO   |     | NULL    |                |
| tot_credit| int         | YES  |     | NULL    |                |
| dept_name | varchar(30) | YES  | MUL | NULL    |                |
```

```
mysql> ALTER TABLE instructor add PRIMARY KEY(id);
Query OK, 0 rows affected (0.48 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> desc instructor;
+-----------+---------------+------+-----+---------+-------+
| Field     | Type          | Null | Key | Default | Extra |
+-----------+---------------+------+-----+---------+-------+
| id        | int           | NO   | PRI | NULL    |       |
| name      | varchar(20)   | NO   |     | NULL    |       |
| salary    | decimal(10,2) | YES  |     | NULL    |       |
| dept_name | varchar(30)   | YES  | MUL | NULL    |       |
+-----------+---------------+------+-----+---------+-------+
4 rows in set (0.00 sec)
```

```
mysql> ALTER TABLE instructor
    -> ALTER COLUMN salary SET DEFAULT 20000;
Query OK, 0 rows affected (0.17 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> desc instructor;
+-----------+---------------+------+-----+----------+-------+
| Field     | Type          | Null | Key | Default  | Extra |
+-----------+---------------+------+-----+----------+-------+
| id        | int           | NO   | PRI | NULL     |       |
| name      | varchar(20)   | NO   |     | NULL     |       |
| salary    | decimal(10,2) | YES  |     | 20000.00 |       |
| dept_name | varchar(30)   | YES  | MUL | NULL     |       |
+-----------+---------------+------+-----+----------+-------+
4 rows in set (0.00 sec)
```

```
mysql> ALTER TABLE instructor
    -> ADD COLUMN address varchar(20),
    -> ADD COLUMN post varchar(20);
Query OK, 0 rows affected (0.13 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> desc instructor;
+-----------+---------------+------+-----+----------+-------+
| Field     | Type          | Null | Key | Default  | Extra |
+-----------+---------------+------+-----+----------+-------+
| id        | int           | NO   | PRI | NULL     |       |
| name      | varchar(20)   | NO   |     | NULL     |       |
| salary    | decimal(10,2) | YES  |     | 20000.00 |       |
| dept_name | varchar(30)   | YES  | MUL | NULL     |       |
| address   | varchar(20)   | YES  |     | NULL     |       |
| post      | varchar(20)   | YES  |     | NULL     |       |
+-----------+---------------+------+-----+----------+-------+
```

```
mysql> ALTER TABLE instructor
    -> DROP COLUMN post;
Query OK, 0 rows affected (0.11 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> desc instructor;
+-----------+---------------+------+-----+----------+-------+
| Field     | Type          | Null | Key | Default  | Extra |
+-----------+---------------+------+-----+----------+-------+
| id        | int           | NO   | PRI | NULL     |       |
| name      | varchar(20)   | NO   |     | NULL     |       |
| salary    | decimal(10,2) | YES  |     | 20000.00 |       |
| dept_name | varchar(30)   | YES  | MUL | NULL     |       |
| address   | varchar(20)   | YES  |     | NULL     |       |
+-----------+---------------+------+-----+----------+-------+
5 rows in set (0.00 sec)
```

```
mysql> drop table inst_dept;
Query OK, 0 rows affected (0.17 sec)

mysql> show tables;
+---------------------+
| Tables_in_bca_satish |
+---------------------+
| advisor             |
| department          |
| instructor          |
| student             |
+---------------------+
4 rows in set (0.12 sec)
```

```
mysql> INSERT INTO department(dept_name,building,budget)
    -> VALUES("BCA","Block A",500000),
    -> ("BSC.CSIT","Block B",800000),
    -> ("BIM","Block C",600000),
    -> ("BBM","Block D",400000),
    -> ("BALLB","Block E",700000);
Query OK, 5 rows affected (0.22 sec)
Records: 5  Duplicates: 0  Warnings: 0

mysql> select * from department;
+-----------+---------+-----------+
| dept_name | building | budget    |
+-----------+---------+-----------+
| BALLB     | Block E  | 700000.00 |
| BBM       | Block D  | 400000.00 |
| BCA       | Block A  | 500000.00 |
| BIM       | Block C  | 600000.00 |
| BSC.CSIT  | Block B  | 800000.00 |
+-----------+---------+-----------+
5 rows in set (0.00 sec)
```

```
mysql> select * from student;
+----+--------+------------+-----------+
| id | name   | tot_credit | dept_name |
+----+--------+------------+-----------+
|  1 | satish |          4 | BCA       |
|  2 | suraj  |          5 | BALLB     |
|  3 | sudeep |          4 | BSC.CSIT  |
|  4 | sharad |          4 | BBM       |
|  5 | ritu   |          4 | BIM       |
+----+--------+------------+-----------+
5 rows in set (0.00 sec)
```

```
mysql> INSERT INTO instructor(name,salary,dept_name,address) VALUES
    -> ("Ranjit",50000,"BSC.CSIT","baneswor"),
    -> ("Anil",60000,"BCA","pokhara"),
    -> ("kamal",20000,"BBM","malangwa"),
    -> ("sushant",70000,"BALLB","tinkune"),
    -> ("sarika",65000,"BIM","janakpur");
Query OK, 5 rows affected (0.06 sec)
Records: 5  Duplicates: 0  Warnings: 0

mysql> select * from instructor;
+----+---------+----------+-----------+----------+
| id | name    | salary   | dept_name | address  |
+----+---------+----------+-----------+----------+
|  1 | Ranjit  | 50000.00 | BSC.CSIT  | baneswor |
|  2 | Anil    | 60000.00 | BCA       | pokhara  |
|  3 | kamal   | 20000.00 | BBM       | malangwa |
|  4 | sushant | 70000.00 | BALLB     | tinkune  |
|  5 | sarika  | 65000.00 | BIM       | janakpur |
+----+---------+----------+-----------+----------+
5 rows in set (0.00 sec)
```

```
mysql> INSERT INTO advisor(s_id,i_id) VALUES
    -> (1,2),
    -> (2,2),
    -> (3,1),
    -> (4,1),
    -> (5,5);
Query OK, 5 rows affected (0.12 sec)
Records: 5  Duplicates: 0  Warnings: 0

mysql> slect * from advisor;
ERROR 1064 (42000): You have an error in your SQL syntax
s to your MySQL server version for the right syntax to u
line 1
mysql> select * from advisor;
+------+------+
| s_id | i_id |
+------+------+
|    1 |    2 |
|    2 |    2 |
|    3 |    1 |
|    4 |    1 |
|    5 |    5 |
+------+------+
5 rows in set (0.00 sec)
```

```
mysql> select dept_name,building from department;
+-----------+----------+
| dept_name | building |
+-----------+----------+
| BALLB     | Block E  |
| BBM       | Block D  |
| BCA       | Block A  |
| BIM       | Block C  |
| BSC.CSIT  | Block B  |
+-----------+----------+
5 rows in set (0.01 sec)
```

```
mysql> select * from department;
+-----------+----------+-----------+
| dept_name | building | budget    |
+-----------+----------+-----------+
| BALLB     | Block E  | 700000.00 |
| BBM       | Block D  | 400000.00 |
| BCA       | Block A  | 500000.00 |
| BIM       | Block C  | 600000.00 |
| BSC.CSIT  | Block B  | 800000.00 |
+-----------+----------+-----------+
5 rows in set (0.00 sec)
```

```
mysql> select dept_name,building from department;
+-----------+----------+
| dept_name | building |
+-----------+----------+
| BALLB     | Block E  |
| BBM       | Block D  |
| BCA       | Block A  |
| BIM       | Block C  |
| BSC.CSIT  | Block B  |
+-----------+----------+
5 rows in set (0.01 sec)
```

```
mysql> select * from department;
+-----------+----------+-----------+
| dept_name | building | budget    |
+-----------+----------+-----------+
| BALLB     | Block E  | 700000.00 |
| BBM       | Block D  | 400000.00 |
| BCA       | Block A  | 500000.00 |
| BIM       | Block C  | 600000.00 |
| BSC.CSIT  | Block B  | 800000.00 |
+-----------+----------+-----------+
5 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM department WHERE building="Block A";
+-----------+----------+-----------+
| dept_name | building | budget    |
+-----------+----------+-----------+
| BCA       | Block A  | 500000.00 |
+-----------+----------+-----------+
1 row in set (0.10 sec)
```

```
mysql> select name from instructor where salary < 50000;
+-------+
| name  |
+-------+
| kamal |
+-------+
1 row in set (0.00 sec)
```

```
mysql> select name from instructor where dept_name="BCA" and salary<50000;
+--------+
| name   |
+--------+
| satish |
+--------+
1 row in set (0.03 sec)
```

```
mysql> select id,name,salary from instructor where dept_name="BIM" or salary != 40000;
+----+---------+----------+
| id | name    | salary   |
+----+---------+----------+
|  1 | Ranjit  | 50000.00 |
|  2 | Anil    | 60000.00 |
|  3 | kamal   | 20000.00 |
|  4 | sushant | 70000.00 |
|  5 | sarika  | 65000.00 |
|  6 | satish  | 30000.00 |
+----+---------+----------+
6 rows in set (0.01 sec)
```

```
mysql> select * from instructor where salary between 30000 and 50000;
+----+--------+----------+-----------+----------+
| id | name   | salary   | dept_name | address  |
+----+--------+----------+-----------+----------+
|  1 | Ranjit | 50000.00 | BSC.CSIT  | baneswor |
|  6 | satish | 30000.00 | BCA       | patan    |
+----+--------+----------+-----------+----------+
2 rows in set (0.11 sec)
```

```
mysql> select * from instructor where salary not between 30000 and 50000;
+----+---------+----------+-----------+----------+
| id | name    | salary   | dept_name | address  |
+----+---------+----------+-----------+----------+
|  2 | Anil    | 60000.00 | BCA       | pokhara  |
|  3 | kamal   | 20000.00 | BBM       | malangwa |
|  4 | sushant | 70000.00 | BALLB     | tinkune  |
|  5 | sarika  | 65000.00 | BIM       | janakpur |
+----+---------+----------+-----------+----------+
4 rows in set (0.04 sec)
```

```
mysql> select * from instructor where id in(1,3,5);
+----+--------+----------+-----------+----------+
| id | name   | salary   | dept_name | address  |
+----+--------+----------+-----------+----------+
|  1 | Ranjit | 50000.00 | BSC.CSIT  | baneswor |
|  3 | kamal  | 20000.00 | BBM       | malangwa |
|  5 | sarika | 65000.00 | BIM       | janakpur |
+----+--------+----------+-----------+----------+
3 rows in set (0.00 sec)
```

```
mysql> select * from instructor where id not in(1,3,5);
+----+---------+----------+-----------+----------+
| id | name    | salary   | dept_name | address  |
+----+---------+----------+-----------+----------+
|  2 | Anil    | 60000.00 | BCA       | pokhara  |
|  4 | sushant | 70000.00 | BALLB     | tinkune  |
|  6 | satish  | 30000.00 | BCA       | patan    |
+----+---------+----------+-----------+----------+
3 rows in set (0.00 sec)
```

```
mysql> select name from instructor where name like "ra%";
+--------+
| name   |
+--------+
| Ranjit |
+--------+
1 row in set (0.00 sec)
```

```
mysql> select address from instructor where address like "%r";
+----------+
| address  |
+----------+
| baneswor |
| janakpur |
+----------+
2 rows in set (0.00 sec)
```

```
mysql> select name from instructor where name like "a%___";
+------+
| name |
+------+
| Anil |
+------+
1 row in set (0.01 sec)
```

```
mysql> select id,name from instructor where name like 'a%___a%';
+----+-------+
| id | name  |
+----+-------+
|  7 | aabha |
+----+-------+
1 row in set (0.06 sec)
```

```
mysql> select dept_name,building from department where building like "%oc%";
+-----------+----------+
| dept_name | building |
+-----------+----------+
| BALLB     | Block E  |
| BBM       | Block D  |
| BCA       | Block A  |
| BIM       | Block C  |
| BSC.CSIT  | Block B  |
+-----------+----------+
5 rows in set (0.04 sec)
```

```
mysql> select name,address,salary from instructor order by salary;
+---------+-----------+-----------+
| name    | address   | salary    |
+---------+-----------+-----------+
| kamal   | malangwa  | 20000.00  |
| satish  | patan     | 30000.00  |
| Ranjit  | baneswor  | 50000.00  |
| Anil    | pokhara   | 60000.00  |
| aabha   | sarlahi   | 60000.00  |
| sarika  | janakpur  | 65000.00  |
| sushant | tinkune   | 70000.00  |
+---------+-----------+-----------+
7 rows in set (0.08 sec)
```

```
mysql> select * from instructor order by name desc;
+----+---------+----------+-----------+-----------+
| id | name    | salary   | dept_name | address   |
+----+---------+----------+-----------+-----------+
|  4 | sushant | 70000.00 | BALLB     | tinkune   |
|  6 | satish  | 30000.00 | BCA       | patan     |
|  5 | sarika  | 65000.00 | BIM       | janakpur  |
|  1 | Ranjit  | 50000.00 | BSC.CSIT  | baneswor  |
|  3 | kamal   | 20000.00 | BBM       | malangwa  |
|  2 | Anil    | 60000.00 | BCA       | pokhara   |
|  7 | aabha   | 60000.00 | BCA       | sarlahi   |
+----+---------+----------+-----------+-----------+
7 rows in set (0.00 sec)
```

```
mysql> select name,salary from instructor order by name asc,salary desc;
+---------+----------+
| name    | salary   |
+---------+----------+
| aabha   | 60000.00 |
| Anil    | 60000.00 |
| kamal   | 20000.00 |
| Ranjit  | 50000.00 |
| sarika  | 65000.00 |
| satish  | 30000.00 |
| sushant | 70000.00 |
+---------+----------+
7 rows in set (0.00 sec)
```

```
mysql> select max(salary),min(salary) from instructor;
+-------------+-------------+
| max(salary) | min(salary) |
+-------------+-------------+
|     7000.00 |     1000.00 |
+-------------+-------------+
1 row in set (0.14 sec)
```

```
mysql> select avg(salary) from instructor;
+-------------+
| avg(salary) |
+-------------+
| 4833.333333 |
+-------------+
1 row in set (0.00 sec)
```

```
mysql> select count(*) from instructor where address in (select address from instructor where address="janakpur");
+----------+
| count(*) |
+----------+
|        1 |
+----------+
1 row in set (0.04 sec)
```

```
mysql> select sum(salary) as total_salary from instructor where dept_name="BBM";
+--------------+
| total_salary |
+--------------+
|      1000.00 |
+--------------+
1 row in set (0.00 sec)
```

```
mysql> select dept_name,avg(salary) from instructor group by dept_name;
+-----------+-------------+
| dept_name | avg(salary) |
+-----------+-------------+
| BALLB     | 7000.000000 |
| BBM       | 1000.000000 |
| BIM       | 6500.000000 |
+-----------+-------------+
3 rows in set (0.00 sec)
```

```
mysql> select dept_name,count(*) as total_instructor from instructor group by dept_name order by total_instructor;
+-----------+------------------+
| dept_name | total_instructor |
+-----------+------------------+
| BALLB     |                1 |
| BBM       |                1 |
| BIM       |                1 |
+-----------+------------------+
3 rows in set (0.11 sec)
```

```
mysql> select dept_name,avg(salary) from instructor group by (dept_name) having avg(salary)>20000;
+-----------+--------------+
| dept_name | avg(salary)  |
+-----------+--------------+
| BBM       | 35500.000000 |
+-----------+--------------+
1 row in set (0.00 sec)
```

```
mysql> select dept_name,count(*) as total_instructor from instructor group by (dept_name) having total_instructor>2;
+-----------+------------------+
| dept_name | total_instructor |
+-----------+------------------+
| BBM       |                3 |
+-----------+------------------+
1 row in set (0.00 sec)
```

Lab 4 and 5 output

```
mysql> select instructor.*,department.dept_name from instructor cross join department;
+----+---------+----------+----------+----------+----------+
| id | name    | salary   | dept_name | address  | dept_name |
+----+---------+----------+----------+----------+----------+
|  1 | Ranjit  | 50000.00 | BSC.CSIT | baneswor | BSC.CSIT |
|  1 | Ranjit  | 50000.00 | BSC.CSIT | baneswor | BIM      |
|  1 | Ranjit  | 50000.00 | BSC.CSIT | baneswor | BCA      |
|  1 | Ranjit  | 50000.00 | BSC.CSIT | baneswor | BBM      |
|  1 | Ranjit  | 50000.00 | BSC.CSIT | baneswor | BALLB    |
|  2 | Anil    | 60000.00 | BCA      | pokhara  | BSC.CSIT |
|  2 | Anil    | 60000.00 | BCA      | pokhara  | BIM      |
|  2 | Anil    | 60000.00 | BCA      | pokhara  | BCA      |
|  2 | Anil    | 60000.00 | BCA      | pokhara  | BBM      |
|  2 | Anil    | 60000.00 | BCA      | pokhara  | BALLB    |
|  3 | kamal   | 20000.00 | BBM      | malangwa | BSC.CSIT |
|  3 | kamal   | 20000.00 | BBM      | malangwa | BIM      |
|  3 | kamal   | 20000.00 | BBM      | malangwa | BCA      |
|  3 | kamal   | 20000.00 | BBM      | malangwa | BBM      |
|  3 | kamal   | 20000.00 | BBM      | malangwa | BALLB    |
|  4 | sushant | 70000.00 | BALLB    | tinkune  | BSC.CSIT |
|  4 | sushant | 70000.00 | BALLB    | tinkune  | BIM      |
|  4 | sushant | 70000.00 | BALLB    | tinkune  | BCA      |
|  4 | sushant | 70000.00 | BALLB    | tinkune  | BBM      |
|  4 | sushant | 70000.00 | BALLB    | tinkune  | BALLB    |
|  5 | sarika  | 65000.00 | BIM      | janakpur | BSC.CSIT |
|  5 | sarika  | 65000.00 | BIM      | janakpur | BIM      |
|  5 | sarika  | 65000.00 | BIM      | janakpur | BCA      |
|  5 | sarika  | 65000.00 | BIM      | janakpur | BBM      |
|  5 | sarika  | 65000.00 | BIM      | janakpur | BALLB    |
|  6 | satish  | 30000.00 | BCA      | patan    | BSC.CSIT |
|  6 | satish  | 30000.00 | BCA      | patan    | BIM      |
|  6 | satish  | 30000.00 | BCA      | patan    | BCA      |
|  6 | satish  | 30000.00 | BCA      | patan    | BBM      |
|  6 | satish  | 30000.00 | BCA      | patan    | BALLB    |
|  7 | aabha   | 60000.00 | BCA      | sarlahi  | BSC.CSIT |
|  7 | aabha   | 60000.00 | BCA      | sarlahi  | BIM      |
|  7 | aabha   | 60000.00 | BCA      | sarlahi  | BCA      |
|  7 | aabha   | 60000.00 | BCA      | sarlahi  | BBM      |
|  7 | aabha   | 60000.00 | BCA      | sarlahi  | BALLB    |
+----+---------+----------+----------+----------+----------+
```

```
mysql> select * from instructor natural join department;
+-----------+----+---------+----------+----------+----------+-----------+
| dept_name | id | name    | salary   | address  | building | budget    |
+-----------+----+---------+----------+----------+----------+-----------+
| BALLB     |  4 | sushant | 70000.00 | tinkune  | Block E  | 700000.00 |
| BBM       |  3 | kamal   | 20000.00 | malangwa | Block D  | 400000.00 |
| BCA       |  2 | Anil    | 60000.00 | pokhara  | Block A  | 500000.00 |
| BCA       |  6 | satish  | 30000.00 | patan    | Block A  | 500000.00 |
| BCA       |  7 | aabha   | 60000.00 | sarlahi  | Block A  | 500000.00 |
| BIM       |  5 | sarika  | 65000.00 | janakpur | Block C  | 600000.00 |
| BSC.CSIT  |  1 | Ranjit  | 50000.00 | baneswor | Block B  | 800000.00 |
+-----------+----+---------+----------+----------+----------+-----------+
7 rows in set (0.02 sec)
```

```
mysql> select * from instructor join department on instructor.dept_name=department.dept_name;
+----+---------+----------+----------+----------+-----------+----------+-----------+
| id | name    | salary   | dept_name | address  | dept_name | building | budget    |
+----+---------+----------+----------+----------+-----------+----------+-----------+
|  4 | sushant | 70000.00 | BALLB    | tinkune  | BALLB     | Block E  | 700000.00 |
|  3 | kamal   | 20000.00 | BBM      | malangwa | BBM       | Block D  | 400000.00 |
|  2 | Anil    | 60000.00 | BCA      | pokhara  | BCA       | Block A  | 500000.00 |
|  6 | satish  | 30000.00 | BCA      | patan    | BCA       | Block A  | 500000.00 |
|  7 | aabha   | 60000.00 | BCA      | sarlahi  | BCA       | Block A  | 500000.00 |
|  5 | sarika  | 65000.00 | BIM      | janakpur | BIM       | Block C  | 600000.00 |
|  1 | Ranjit  | 50000.00 | BSC.CSIT | baneswor | BSC.CSIT  | Block B  | 800000.00 |
+----+---------+----------+----------+----------+-----------+----------+-----------+
7 rows in set (0.03 sec)
```

```
mysql> select * from department join instructor on department.dept_name=instructor.dept_name;
+-----------+-----------+------------+-----+----------+----------+-----------+-----------+
| dept_name | building  | budget     | id  | name     | salary   | dept_name | address   |
+-----------+-----------+------------+-----+----------+----------+-----------+-----------+
| BALLB     | Block E   | 700000.00  | 4   | sushant  | 70000.00 | BALLB     | tinkune   |
| BBM       | Block D   | 400000.00  | 3   | kamal    | 20000.00 | BBM       | malangwa  |
| BCA       | Block A   | 500000.00  | 2   | Anil     | 60000.00 | BCA       | pokhara   |
| BCA       | Block A   | 500000.00  | 6   | satish   | 30000.00 | BCA       | patan     |
| BCA       | Block A   | 500000.00  | 7   | aabha    | 60000.00 | BCA       | sarlahi   |
| BIM       | Block C   | 600000.00  | 5   | sarika   | 65000.00 | BIM       | janakpur  |
| BSC.CSIT  | Block B   | 800000.00  | 1   | Ranjit   | 50000.00 | BSC.CSIT  | baneswor  |
+-----------+-----------+------------+-----+----------+----------+-----------+-----------+
7 rows in set (0.00 sec)
```

```
mysql> select * from instructor join department on instructor.dept_name=department.dept_name join student on department.dept_
name=student.dept_name;
+-----+---------+----------+-----------+-----------+-----------+-----------+-----------+-----+---------+------------+-----------+
| id  | name    | salary   | dept_name | address   | dept_name | building  | budget    | id  | name    | tot_credit | dept_name |
+-----+---------+----------+-----------+-----------+-----------+-----------+-----------+-----+---------+------------+-----------+
| 2   | Anil    | 60000.00 | BCA       | pokhara   | BCA       | Block A   | 500000.00 | 1   | satish  | 4          | BCA       |
| 6   | satish  | 30000.00 | BCA       | patan     | BCA       | Block A   | 500000.00 | 1   | satish  | 4          | BCA       |
| 7   | aabha   | 60000.00 | BCA       | sarlahi   | BCA       | Block A   | 500000.00 | 1   | satish  | 4          | BCA       |
| 4   | sushant | 70000.00 | BALLB     | tinkune   | BALLB     | Block E   | 700000.00 | 2   | suraj   | 5          | BALLB     |
| 1   | Ranjit  | 50000.00 | BSC.CSIT  | baneswor  | BSC.CSIT  | Block B   | 800000.00 | 3   | sudeep  | 4          | BSC.CSIT  |
| 3   | kamal   | 20000.00 | BBM       | malangwa  | BBM       | Block D   | 400000.00 | 4   | sharad  | 4          | BBM       |
| 5   | sarika  | 65000.00 | BIM       | janakpur  | BIM       | Block C   | 600000.00 | 5   | ritu    | 4          | BIM       |
+-----+---------+----------+-----------+-----------+-----------+-----------+-----------+-----+---------+------------+-----------+
7 rows in set (0.17 sec)
```

```
mysql> select instructor.name from instructor join department on instructor.dept_name=department.dept_name where department.b
uilding="Block A" and department.budget>100000;
+--------+
| name   |
+--------+
| Anil   |
| satish |
| aabha  |
+--------+
3 rows in set (0.01 sec)
```

```
mysql> select instructor.name from instructor join department on instructor.dept_name=department.dept_name where department.b
uilding<>'Block A' or (department.building='Block A' and department.budget<=100000);
+---------+
| name    |
+---------+
| sushant |
| kamal   |
| sarika  |
| Ranjit  |
+---------+
4 rows in set (0.00 sec)
```

```
mysql> select name,salary from instructor where salary<all(select salary from instructor where address='baneswor');
+--------+----------+
| name   | salary   |
+--------+----------+
| kamal  | 20000.00 |
| satish | 30000.00 |
+--------+----------+
2 rows in set (0.00 sec)
```

```
mysql> select dept_name from instructor group by dept_name having avg(salary)=(select max(avg_salary) from (select avg(salary
) as avg_salary from instructor group by dept_name)as temp);
+-----------+
| dept_name |
+-----------+
| BALLB     |
+-----------+
1 row in set (0.10 sec)
```

```
mysql> select * from department where dept_name in(select distinct dept_name from
instructor);
+-----------+----------+-----------+
| dept_name | building | budget    |
+-----------+----------+-----------+
| BALLB     | Block E  | 700000.00 |
| BBM       | Block D  | 400000.00 |
| BCA       | Block A  | 500000.00 |
| BIM       | Block C  | 600000.00 |
| BSC.CSIT  | Block B  | 800000.00 |
+-----------+----------+-----------+
5 rows in set (0.11 sec)
```

```
mysql> select * from department where dept_name not in(select distinct dept_name from instructor);
Empty set (0.00 sec)
```

```
mysql> update instructor set salary=salary*0.5 where salary < 60000;
Query OK, 3 rows affected (0.74 sec)
Rows matched: 3  Changed: 3  Warnings: 0
```

```
mysql> update instructor set salary=salary*0.10;
Query OK, 7 rows affected (0.22 sec)
Rows matched: 7  Changed: 7  Warnings: 0
```

```
mysql> update student set tot_credit=45 where dept_name='BCA';
Query OK, 1 row affected (0.06 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> delete from instructor where dept_name='BCA';
Query OK, 3 rows affected (0.12 sec)
```

```
mysql> delete from instructor where dept_name in (select dept_name from department where building = 'Block B');
Query OK, 1 row affected (0.06 sec)
```

```
mysql> delete from student where tot_credit between 4 and 10;
Query OK, 4 rows affected (0.02 sec)
```

```
mysql> create view faculty as select id,name,dept_name as department from instructor;
Query OK, 0 rows affected (0.45 sec)
```

```
mysql> create view dept_total_salary as select dept_name,sum(salary) as total_salary from instructor group by dept_name;
Query OK, 0 rows affected (0.07 sec)
```

```
mysql> select * from dept_total_salary;
+-----------+--------------+
| dept_name | total_salary |
+-----------+--------------+
| BALLB     |      7000.00 |
| BBM       |      1000.00 |
| BIM       |      6500.00 |
+-----------+--------------+
3 rows in set (0.11 sec)
```