Assignment 2

**Set A**

mysql> create table employee(emp\_no int primary key,name varchar(40),address varchar(30),salary int,dept\_no int);

mysql> insert into employee values(1,'raj','pune',2000,101),(2,'jay','pune',2345,102),(3,'ritesh','thane',1928,105),(4,'adi','nashik',3636,103),(5,'rani','pune',2354,104),(6,'gita','mumbai',6475,106),(7,mohini ','lonavla',2374,107),(8,'dnyanu','pune',3546,108),(9,'neha','mumbai',2556,109),(10,'manish','thane',6678,110); mysql> select \* from employee;

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

| emp\_no | name | address | salary | dept\_no |

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

| 1 |raj | pune | 2000 | 101 |

| 2 |jay | pune | 2345 | 102 |

| 3 |ritesh | thane | 1928 | 105 |

| 4 | adi| nashik | 3636 | 103 |

| 5 |rani | pune | 2354 | 104 |

| 6 |gita | mumbai | 6475 | 106 |

| 7 |mohini | lonavla | 2374 | 107 |

| 8 | dnyanu| pune | 3546 | 108 |

| 9 |neha | mumbai | 2556 | 109 |

| 10 |manish | thane | 6678 | 110 |

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

mysql> select name from employee;

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

| name |

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

|raj |

|jay |

|ritesh |

|adi |

|rani |

| gita |

|mohini |

| dnyanu |

| neha |

| manish |

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

10 rows in set (0.00 sec)

mysql> select distinct dept\_no from employee;

+---------+

| dept\_no |

+---------+

| 101 |

| 102 |

| 105 |

| 103 |

| 104 |

| 106 |

| 107 |

| 108 |

| 109 |

| 110 |

+---------+

mysql> select \* from employee where dept\_no=106;

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

| emp\_no | name | address | salary | dept\_no |

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

| 6 | gita| mumbai | 6475 | 106 |

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

mysql> select \* from employee where address='pune' and salary>2000;

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

| emp\_no | name | address | salary | dept\_no |

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

| 2 | jay | pune | 2345 | 102 |

| 5 | rani| pune | 2354 | 104 |

| 8 | dnyanu | pune | 3546 | 108 |

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

mysql> select \* from employee where name like'\_\_\_%';

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

| emp\_no | name | address | salary | dept\_no |

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

| 1 |raj | pune | 2000 | 101 |

| 2 |jay | pune | 2345 | 102 |

| 3 |ritash | thane | 1928 | 105 |

| 4 |adi | nashik | 3636 | 103 |

| 5 |rani | pune | 2354 | 104 |

| 6 |gita | mumbai | 6475 | 106 |

| 7 |mohini | lonavla | 2374 | 107 |

| 8 | dnyanu| pune | 3546 | 108 |

| 9 |neha | mumbai | 2556 | 109 |

| 10 |manish | thane | 6678 | 110 |

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

mysql> select \* from employee where name like'%a%';

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

| emp\_no | name | address | salary | dept\_no |

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

| 1 |raj | pune | 2000 | 101 |

| 2 |jay | pune | 2345 | 102 |

| 4 |adi | nashik | 3636 | 103 |

| 5 |rani | pune | 2354 | 104 |

| 7 | mohini | lonavla | 2374 | 107 |

| 8 | dnyanu| pune | 3546 | 108 |

| 9 |neha | mumbai | 2556 | 109 |

| 10 |manish| thane | 6678 | 110 |

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

mysql> select \* from employee where name like'%i%';

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

| emp\_no | name | address | salary | dept\_no |

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

| 3 | ritash| thane | 1928 | 105 |

| 4 |adi | nashik | 3636 | 103 |

| 5 | rani| pune | 2354 | 104 |

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

mysql> select \* from employee where salary=null;

Empty set (0.00 sec)

mysql> select \* from employee order by emp\_no;

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

| emp\_no | name | address | salary | dept\_no |

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

| 1 |raj | pune | 2000 | 101 |

| 2 |jay | pune | 2345 | 102 |

| 3 |ritesh | thane | 1928 | 105 |

| 4 |adi | nashik | 3636 | 103 |

| 5 |rani | pune | 2354 | 104 |

| 6 |gita | mumbai | 6475 | 106 |

| 7 |neha | lonavla | 2374 | 107 |

| 8 | dnyanu| pune | 3546 | 108 |

| 9 |mohini | mumbai | 2556 | 109 |

| 10 |manish | thane | 6678 | 110 |

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

mysql> select \* from employee order by dept\_no,emp\_no desc;

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

| emp\_no | name | address | salary | dept\_no |

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

| 1 |raj | pune | 2000 | 101 |

| 2 |jay | pune | 2345 | 102 |

| 4 |adi | nashik | 3636 | 103 |

| 5 |rani | pune | 2354 | 104 |

| 3 | ritesh| thane | 1928 | 105 |

| 6 |gita | mumbai | 6475 | 106 |

| 7 | neha| lonavla | 2374 | 107 |

| 8 | dnyanu| pune | 3546 | 108 |

| 9 |mohini | mumbai | 2556 | 109 |

| 10 |manish | thane | 6678 | 110 |

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

mysql> select dept\_no as department,sum(salary) as total\_employee from employee group by dept\_no order by dept\_no;

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

| department | total\_employee |

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

| 101 | 2000 |

| 102 | 2345 |

| 103 | 3636 |

| 104 | 2354 |

| 105 | 1928 |

| 106 | 6475 |

| 107 | 2374 |

| 108 | 3546 |

| 109 | 2556 |

| 110 | 6678 |

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

mysql> select avg(salary) from employee;

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

| avg(salary) |

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

| 3389.2000 |

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

1 row in set (0.00 sec)

mysql> select max(salary),dept\_no from employee group by dept\_no having max(salary)>3000;

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

| max(salary) | dept\_no |

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

| 3636 | 103 |

| 6475 | 106 |

| 3546 | 108 |

| 6678 | 110 |

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

Set B

mysql> create table department(dno int primary key,dname varchar(30));

mysql> insert into department values(1,'bca'),(2,'mca'),(3,'bsc'),(4,'mcom'),(5,'msc');

mysql> select \* from department;

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

| dno | dname |

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

| 1 | bca |

| 2 | mca |

| 3 | bsc |

| 4 | mcom |

| 5 | msc |

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

mysql> create table non\_teaching(emp\_no int primary key,name varchar(20),address varchar(20),salary int,dno int references department);

mysql>insert into non\_teaching values(1,'anu','pune',12345, 4),(2,'disha','pune',12785,3),(3,'puja','mumbai',30000,2),(4,'shiv','thane',12885,5),(5 ‘meena','pune',12245,1),(6,'nina','goa',22345,4),(7,'mahi','goa',33345,5),(8,'miraj','delhi',42345,3),(9,'ritu','heydarabad',32345,2),(10,'ishan','chandigarh',11345,1);

mysql> select \* from non\_teaching;

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

| emp\_no | name | address | salary | dno |

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

| 1 |anu | pune | 12345 | 4 |

| 2 |disha | pune | 12785 | 3 |

| 3 | puja| mumbai | 30000 | 2 |

| 4 |shiv | thane | 12885 | 5 |

| 5 | meena | pune | 12245 | 1 |

| 6 | nina | goa | 22345 | 4 |

| 7 | mahi | goa | 33345 | 5 |

| 8 | miraj | delhi | 42345 | 3 |

| 9 | ritu | heydarabad | 32345 | 2 |

| 10 | ishan | chandigarh | 11345 | 1 |

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

mysql> create table teaching(emp\_no int primary key,name varchar(20),address varchar(20),salary int,dno int references department);

mysql> insert into teaching values(1,'gaurav','pune',12545,3),(2,'nikhil','pune',22785,4),(3,'nilesh','mumbai',33000,5),(4,'vidya','thane',12885,1),(5,'acha

l','pune',32245,2),(6,'manasi','goa',21345,3),(7,'maheshwari','goa',13345,4),(8,'mayra','delhi',44345,5),(9,'riyansh','heydarabad',31345,1),(10,'vrushali','

chandigarh',12345,2);

mysql> select \* from teaching;

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

| emp\_no | name | address | salary | dno |

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

| 1 | gaurav | pune | 12545 | 3 |

| 2 | nikhil | pune | 22785 | 4 |

| 3 | nilesh | mumbai | 33000 | 5 |

| 4 | vidya | thane | 12885 | 1 |

| 5 | achal | pune | 32245 | 2 |

| 6 | manasi | goa | 21345 | 3 |

| 7 | maheshwari | goa | 13345 | 4 |

| 8 | mayra | delhi | 44345 | 5 |

| 9 | riyansh | heydarabad | 31345 | 1 |

| 10 | vrushali | chandigarh | 12345 | 2 |

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

mysql> select emp\_no from non\_teaching union select emp\_no from teaching;

+--------+

| emp\_no |

+--------+

| 1 |

| 2 |

| 3 |

| 4 |

| 5 |

| 6 |

| 7 |

| 8 |

| 9 |

| 10 |

+--------+

10 rows in set (0.01 sec)

mysql> select emp\_no from non\_teaching union all select emp\_no from teaching;

+--------+

| emp\_no |

+--------+

| 1 |

| 2 |

| 3 |

| 4 |

| 5 |

| 6 |

| 7 |

| 8 |

| 9 |

| 10 |

| 1 |

| 2 |

| 3 |

| 4 |

| 5 |

| 6 |

| 7 |

| 8 |

| 9 |

| 10 |

+--------+

20 rows in set (0.00 sec)

mysql> select name from non\_teaching intersect select name from teaching;

Empty set (0.00 sec)

mysql> select name from non\_teaching intersect all select name from teaching;

Empty set (0.00 sec)

mysql> select name from non\_teaching except select name from teaching;

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

| name |

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

| anay |

| anaya |

| shreya |

| shashank |

| meenal |

| ninad |

| mahesh |

| mira |

| riya |

| isha |

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

10 rows in set (0.00 sec)

mysql> select name from non\_teaching except all select name from teaching;

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

| name |

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

| anay |

| anaya |

| shreya |

| shashank |

| meenal |

| ninad |

| mahesh |

| mira |

| riya |

| isha |

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