Assignment No:4(Group B)

Title: Implement nested sub queries. Perform a test for set membership (in, not in), set comparison (<some, >=some, <all etc.)

and set cardinality (unique, not unique).

Batch No: T1 Roll No:06

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mysql> use tejas;

mysql> create table E\_DEPT(EMP\_ID integer(10),

-> EMP\_DEPT char(10));

Query OK, 0 rows affected (0.80 sec)

mysql> insert into E\_DEPT values(7369,'computer');

Query OK, 1 row affected (0.08 sec)

mysql> insert into E\_DEPT values(7499,'computer');

Query OK, 1 row affected (0.06 sec)

mysql> insert into E\_DEPT values(7521,'civil');

Query OK, 1 row affected (0.09 sec)

mysql> insert into E\_DEPT values(7566,'ETC');

Query OK, 1 row affected (0.04 sec)

mysql> insert into E\_DEPT values(7654,'ETC');

Query OK, 1 row affected (0.07 sec)

mysql> insert into E\_DEPT values(7698,'ETC');

Query OK, 1 row affected (0.08 sec)

mysql> insert into E\_DEPT values(7782,'electrical');

Query OK, 1 row affected (0.04 sec)

mysql> insert into E\_DEPT values(7788,'electrical');

Query OK, 1 row affected (0.09 sec)

mysql> insert into E\_DEPT values(7839,'IT');

Query OK, 1 row affected (0.07 sec)

mysql> insert into E\_DEPT values(7844,'IT');

Query OK, 1 row affected (0.08 sec)

mysql> insert into E\_DEPT values(7876,'civil');

Query OK, 1 row affected (0.07 sec)

mysql> insert into E\_DEPT values(7900,'computer');

Query OK, 1 row affected (0.05 sec)

mysql> select \* from E\_DEPT;

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

| EMP\_ID | EMP\_DEPT |

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

| 7369 | computer |

| 7499 | computer |

| 7521 | civil |

| 7566 | ETC |

| 7654 | ETC |

| 7698 | ETC |

| 7782 | electrical |

| 7788 | electrical |

| 7839 | IT |

| 7844 | IT |

| 7876 | civil |

| 7900 | computer |

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

12 rows in set (0.00 sec)

mysql> select \* from EMP;

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

| EMP\_ID | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPT\_NO |

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

| 7369 | smith | clerk | 7902 | 1980-06-17 | 800 | NULL | 20 |

| 7499 | allen | saleman | 7698 | 1981-12-20 | 1600 | 300 | 30 |

| 7521 | ward | saleman | 7698 | 1981-02-22 | 1250 | 500 | 30 |

| 7566 | jones | manager | 7839 | 1981-04-02 | 2975 | NULL | 20 |

| 7654 | martin | saleman | 7698 | 1981-09-28 | 1250 | 1400 | 30 |

| 7698 | blake | manager | 7839 | 1981-05-01 | 2850 | NULL | 30 |

| 7782 | clark | manager | 7539 | 1981-06-09 | 2450 | NULL | 10 |

| 7788 | scott | analyst | 7566 | 1981-04-19 | 1600 | NULL | 20 |

| 7839 | king | president | NULL | 1981-11-17 | 5000 | NULL | 10 |

| 7844 | turner | saleman | 7698 | 1981-09-08 | 1500 | NULL | 10 |

| 7876 | adams | clerk | 7876 | 1981-05-23 | 1100 | NULL | 10 |

| 7900 | james | clerk | 7698 | 1981-12-03 | 800 | NULL | 30 |

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

12 rows in set (0.00 sec)

mysql> select \* from EMP where EMP\_ID IN(select EMP\_ID from E\_DEPT where EMP\_DEPT='computer');

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

| EMP\_ID | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPT\_NO |

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

| 7369 | smith | clerk | 7902 | 1980-06-17 | 800 | NULL | 20 |

| 7499 | allen | saleman | 7698 | 1981-12-20 | 1600 | 300 | 30 |

| 7900 | james | clerk | 7698 | 1981-12-03 | 800 | NULL | 30 |

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

3 rows in set (0.00 sec)

ysql> update EMP set sal=sal\*0.50 where EMP\_ID IN (select EMP\_ID from E\_DEPT where EMP\_DEPT='civil');

Query OK, 2 rows affected (0.06 sec)

Rows matched: 2 Changed: 2 Warnings: 0

mysql> select \* from EMP;

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

| EMP\_ID | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPT\_NO |

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

| 7369 | smith | clerk | 7902 | 1980-06-17 | 800 | NULL | 20 |

| 7499 | allen | saleman | 7698 | 1981-12-20 | 1600 | 300 | 30 |

| 7521 | ward | saleman | 7698 | 1981-02-22 | 625 | 500 | 30 |

| 7566 | jones | manager | 7839 | 1981-04-02 | 2975 | NULL | 20 |

| 7654 | martin | saleman | 7698 | 1981-09-28 | 1250 | 1400 | 30 |

| 7698 | blake | manager | 7839 | 1981-05-01 | 2850 | NULL | 30 |

| 7782 | clark | manager | 7539 | 1981-06-09 | 2450 | NULL | 10 |

| 7788 | scott | analyst | 7566 | 1981-04-19 | 1600 | NULL | 20 |

| 7839 | king | president | NULL | 1981-11-17 | 5000 | NULL | 10 |

| 7844 | turner | saleman | 7698 | 1981-09-08 | 1500 | NULL | 10 |

| 7876 | adams | clerk | 7876 | 1981-05-23 | 550 | NULL | 10 |

| 7900 | james | clerk | 7698 | 1981-12-03 | 800 | NULL | 30 |

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

12 rows in set (0.00 sec)

mysql>delete from EMP where EMP\_ID IN (select EMP\_ID from E\_DEPT where EMP\_DEPT='computer');

Query OK, 3 rows affected (0.00 sec)

mysql> select \* from EMP;

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

| EMP\_ID | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPT\_NO |

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

| 7521 | ward | saleman | 7698 | 1981-02-22 | 625 | 500 | 30 |

| 7566 | jones | manager | 7839 | 1981-04-02 | 2975 | NULL | 20 |

| 7654 | martin | saleman | 7698 | 1981-09-28 | 1250 | 1400 | 30 |

| 7698 | blake | manager | 7839 | 1981-05-01 | 2850 | NULL | 30 |

| 7782 | clark | manager | 7539 | 1981-06-09 | 2450 | NULL | 10 |

| 7788 | scott | analyst | 7566 | 1981-04-19 | 1600 | NULL | 20 |

| 7839 | king | president | NULL | 1981-11-17 | 5000 | NULL | 10 |

| 7844 | turner | saleman | 7698 | 1981-09-08 | 1500 | NULL | 10 |

| 7876 | adams | clerk | 7876 | 1981-05-23 | 550 | NULL | 10 |

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

12 rows in set (0.00 sec)

mysql> update EMP set sal=sal\*0.50 where EMP\_ID not IN (select EMP\_ID from E\_DEPT where EMP\_DEPT='civil');

Query OK, 10 rows affected (0.08 sec)

Rows matched: 10 Changed: 10 Warnings: 0

mysql> select \* from EMP;

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

| EMP\_ID | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPT\_NO |

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

| 7521 | ward | saleman | 7698 | 1981-02-22 | 625 | 500 | 30 |

| 7566 | jones | manager | 7839 | 1981-04-02 | 1488 | NULL | 20 |

| 7654 | martin | saleman | 7698 | 1981-09-28 | 625 | 1400 | 30 |

| 7698 | blake | manager | 7839 | 1981-05-01 | 1425 | NULL | 30 |

| 7782 | clark | manager | 7539 | 1981-06-09 | 1225 | NULL | 10 |

| 7788 | scott | analyst | 7566 | 1981-04-19 | 800 | NULL | 20 |

| 7839 | king | president | NULL | 1981-11-17 | 2500 | NULL | 10 |

| 7844 | turner | saleman | 7698 | 1981-09-08 | 750 | NULL | 10 |

| 7876 | adams | clerk | 7876 | 1981-05-23 | 550 | NULL | 10 |

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

12 rows in set (0.00 sec)

mysql>delete from EMP where EMP\_ID not IN (select EMP\_ID from E\_DEPT where EMP\_DEPT='computer');

Query OK, 9 rows affected (0.00 sec)

mysql> select \* from EMP;

Empty set (0.00 sec)

mysql> create table EMP33(id integer,

-> name char(10),

-> city char(10),

-> sal integer);

Query OK, 0 rows affected (0.29 sec)

mysql> insert into EMP33 values(1,'aditya','Delhi',2000);

Query OK, 1 row affected (0.11 sec)

mysql> insert into EMP33 values(2,'yogesh','pune',10000);

Query OK, 1 row affected (0.06 sec)

mysql> insert into EMP33 values(3,'tejas','pune',10000);

Query OK, 1 row affected (0.10 sec)

mysql> create table EMP34(id integer,

-> name char(10),

-> city char(10),

-> sal integer);

Query OK, 0 rows affected (0.32 sec)

mysql> insert into EMP34 values(4,'pooja','Delhi',2000);

Query OK, 1 row affected (0.07 sec)

mysql> insert into EMP34 values(5,'priya','pune',10000);

Query OK, 1 row affected (0.07 sec)

mysql> insert into EMP34 values(6,'snehal','pune',10000);

Query OK, 1 row affected (0.07 sec)

mysql> select \* from EMP33;

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

| id | name | city | sal |

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

| 1 | aditya | Delhi | 2000 |

| 2 | yogesh | pune | 10000 |

| 3 | tejas | pune | 10000 |

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

3 rows in set (0.00 sec)

mysql> select \* from EMP34;

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

| id | name | city | sal |

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

| 4 | pooja | Delhi | 2000 |

| 5 | priya | pune | 10000 |

| 6 | snehal | pune | 10000 |

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

3 rows in set (0.00 sec)

mysql> select \* from EMP33 where sal<some(select sal from EMP34 where city='pune');

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

| id | name | city | sal |

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

| 1 | aditya | Delhi | 2000 |

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

1 row in set (0.00 sec)

mysql> select \* from EMP33 where sal<=some(select sal from EMP34 where city='pune');

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

| id | name | city | sal |

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

| 1 | aditya | Delhi | 2000 |

| 2 | yogesh | pune | 10000 |

| 3 | tejas | pune | 10000 |

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

3 rows in set (0.00 sec)

mysql> select \* from EMP33 where sal>=some(select sal from EMP34 where city='pune');

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

| id | name | city | sal |

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

| 2 | yogesh | pune | 10000 |

| 3 | tejas | pune | 10000 |

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

2 rows in set (0.00 sec)

mysql> select \* from EMP33 where sal<all(select sal from EMP34 where city='pune');

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

| id | name | city | sal |

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

| 1 | aditya | Delhi | 2000 |

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

1 row in set (0.00 sec)

mysql> select \* from EMP33 where sal<=all(select sal from EMP34 where city='pune');

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

| id | name | city | sal |

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

| 1 | aditya | Delhi | 2000 |

| 2 | yogesh | pune | 10000 |

| 3 | tejas | pune | 10000 |

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

3 rows in set (0.00 sec)

mysql> select \* from EMP33 where sal>=all(select sal from EMP34 where city='pune');

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

| id | name | city | sal |

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

| 2 | yogesh | pune | 10000 |

| 3 | tejas | pune | 10000 |

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

2 rows in set (0.00 sec)