LAB 2

Lab 2 includes all the SELECT queries mentioned in Lab 1 Manual and the following :

Sub-Query : Basic –

SELECT within SELECT command (also called subquery: query inside query)

Subqueries are legal in a SELECT statement's FROM clause. The actual syntax is:

```
SELECT ... FROM (subquery) [AS] name ...
```

The [AS] name clause is mandatory, because every table in a FROM clause must have a name. Any columns in the subquery select list must have unique names.

For the sake of illustration, assume that you have this table:

```
CREATE TABLE t1 (s1 INT, s2 CHAR(5), s3 FLOAT);
```

Here is how to use a subquery in the FROM clause, using the example table:

```
INSERT INTO t1 VALUES (1,'1',1.0);

INSERT INTO t1 VALUES (2,'2',2.0);

SELECT sb1,sb2,sb3
 FROM (SELECT s1 AS sb1, s2 AS sb2, s3*2 AS sb3 FROM t1) AS sb
 WHERE sb1 > 1;
```

```
+------+------+------+
| sb1  | sb2  | sb3  |
+------+------+------+
|    2 | 2    |    4 |
+------+------+------+
```

Here is another example: Suppose that you want to know the average of a set of sums for a grouped table.

This does not work:

```
SELECT AVG(SUM(column1)) FROM t1 GROUP BY column1;
```

However, this query provides the desired information:

```
SELECT AVG(sum_column1)
 FROM (SELECT SUM(column1) AS sum_column1
       FROM t1 GROUP BY column1) AS t1;
```

Notice that the column name used within the subquery (sum_column1) is recognized in the outer query.

====> Home task: Practice a few subqueries type problems from your text book or any MySql manual books.

----DBS Lab 02 Evaluation will be based on SELECT queries and subqueries.