MariaDB [(none)]> show databases;

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

| Database |

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

| information\_schema |

| test |

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

2 rows in set (0.00 sec)

MariaDB [(none)]> use test;

Database changed

MariaDB [test]> CREATE TABLE salesman( salesman\_id INTEGER(5) PRIMARY KEY, name VARCHAR(30) NOT NULL, city VARCHAR(15), commission FLOAT(5,2));

Query OK, 0 rows affected (0.01 sec)

MariaDB [test]> INSERT INTO salesman VALUES(5001,'James Hoog','New York',0.15);INSERT INTO salesman VALUES(5002,'Nail Knite','Paris',0.13);INSERT INTO salesman VALUES(5005,'Pit Alex','London',0.11);INSERT INTO salesman VALUES(5006,'Mc Lyon','Paris',0.14);INSERT INTO salesman VALUES(5003,'Lauson Hen','San Jose',0.12);INSERT INTO salesman VALUES(5007,'Paul Adam','Rome',0.13);

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.02 sec)

Query OK, 1 row affected (0.00 sec)

MariaDB [test]> CREATE TABLE customer ( customer\_id INTEGER(5) PRIMARY KEY, cust\_name VARCHAR(30) NOT NULL, city VARCHAR(15), grade INTEGER(3) DEFAULT 0, salesman\_id INTEGER(5) NOT NULL, FOREIGN KEY (salesman\_id) REFERENCES salesman(salesman\_id));

Query OK, 0 rows affected (0.01 sec)

MariaDB [test]> INSERT INTO customer VALUES(3002,'Nick Rimando','New York',100,5001);INSERT INTO customer VALUES(3007,'Brad Davis','New York',200,5001);INSERT INTO customer VALUES(3003,'Jozy Altidor','Moscow',200,5007);INSERT INTO customer VALUES(3005,'Graham Zusi','California',200,5002);INSERT INTO customer VALUES(3008,'Julian Green','London',300,5002);INSERT INTO customer VALUES(3004,'Fabian Johnson','Paris',300,5006);INSERT INTO customer VALUES(3009,'Geoff Cameron','Berlin',100,5003);INSERT INTO customer VALUES(3001,'Brad Guzan','London',NULL,5005);

Query OK, 1 row affected (0.02 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.01 sec)

MariaDB [test]> CREATE TABLE orders ( ord\_no INTEGER(5) PRIMARY KEY, purch\_amt FLOAT(8,2) DEFAULT 0, ord\_date date, customer\_id INTEGER(5) NOT NULL, salesman\_id INTEGER(5) NOT NULL, FOREIGN KEY (salesman\_id) REFERENCES salesman(salesman\_id), FOREIGN KEY (customer\_id) REFERENCES customer(customer\_id));

Query OK, 0 rows affected (0.02 sec)

MariaDB [test]> INSERT INTO orders VALUES(70009,270.65,'2012-09-10',3001,5005);INSERT INTO orders VALUES(70002,65.26,'2012-10-05',3002,5001);INSERT INTO orders VALUES(70004,110.50,'2012-08-17',3009,5003);INSERT INTO orders VALUES(70005,2400.60,'2012-07-27',3007,5001);INSERT INTO orders VALUES(70008,5760.00,'2012-09-10',3002,5001);INSERT INTO orders VALUES(70010,1983.43,'2012-10-10',3004,5006);INSERT INTO orders VALUES(70003,2480.40,'2012-10-10',3009,5003);INSERT INTO orders VALUES(70011,75.29,'2012-08-17',3003,5007);INSERT INTO orders VALUES(70013,3045.60,'2012-04-25',3002,5001);INSERT INTO orders VALUES(70001,150.50,'2012-10-05',3005,5002);INSERT INTO orders VALUES(70007,948.50,'2012-09-10',3005,5002);INSERT INTO orders VALUES(70012,250.45,'2012-06-27',3008,5002);

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.02 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

MariaDB [test]> show tables;

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

| Tables\_in\_test |

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

| customer |

| orders |

| salesman |

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

3 rows in set (0.00 sec)

MariaDB [test]> select \* from orders;

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

| ord\_no | purch\_amt | ord\_date | customer\_id | salesman\_id |

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

| 70001 | 150.50 | 2012-10-05 | 3005 | 5002 |

| 70002 | 65.26 | 2012-10-05 | 3002 | 5001 |

| 70003 | 2480.40 | 2012-10-10 | 3009 | 5003 |

| 70004 | 110.50 | 2012-08-17 | 3009 | 5003 |

| 70005 | 2400.60 | 2012-07-27 | 3007 | 5001 |

| 70007 | 948.50 | 2012-09-10 | 3005 | 5002 |

| 70008 | 5760.00 | 2012-09-10 | 3002 | 5001 |

| 70009 | 270.65 | 2012-09-10 | 3001 | 5005 |

| 70010 | 1983.43 | 2012-10-10 | 3004 | 5006 |

| 70011 | 75.29 | 2012-08-17 | 3003 | 5007 |

| 70012 | 250.45 | 2012-06-27 | 3008 | 5002 |

| 70013 | 3045.60 | 2012-04-25 | 3002 | 5001 |

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

12 rows in set (0.00 sec)

MariaDB [test]> select \* from orders where salesman\_id = (select salesman\_id from salesman where name='Paul Adam');

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

| ord\_no | purch\_amt | ord\_date | customer\_id | salesman\_id |

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

| 70011 | 75.29 | 2012-08-17 | 3003 | 5007 |

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

1 row in set (0.00 sec)

MariaDB [test]> select \* from orders where salesman\_id = (select distinct salesman\_id from orders where customerid=3007);

ERROR 1054 (42S22): Unknown column 'customerid' in 'where clause'

MariaDB [test]> select \* from orders where salesman\_id = (select distinct salesman\_id from orders where customer\_id =3007);

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

| ord\_no | purch\_amt | ord\_date | customer\_id | salesman\_id |

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

| 70002 | 65.26 | 2012-10-05 | 3002 | 5001 |

| 70005 | 2400.60 | 2012-07-27 | 3007 | 5001 |

| 70008 | 5760.00 | 2012-09-10 | 3002 | 5001 |

| 70013 | 3045.60 | 2012-04-25 | 3002 | 5001 |

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

4 rows in set (0.00 sec)

MariaDB [test]> select \* from orders where purch\_amt < (select avg purch\_amt) from orders where ord\_date '10/10/2012');

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'from orders where ord\_date '10/10/2012')' at line 1

MariaDB [test]> select \* from orders where purch\_amt < (select avg purch\_amt) from orders where ord\_date ='10/10/2012');

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'from orders where ord\_date ='10/10/2012')' at line 1

MariaDB [test]> select \* from orders where purch\_amt < (select avg (purch\_amt) from orders where ord\_date ='10/10/2012');

Empty set, 1 warning (0.00 sec)

MariaDB [test]> select \* from orders where purch\_amt > (select avg (purch\_amt) from orders where ord\_date ='10/10/2012');

Empty set, 1 warning (0.02 sec)

MariaDB [test]> select \* from orders where purch\_amt > (select avg (purch\_amt) from orders where ord\_date ='10-10-2012');

Empty set, 1 warning (0.00 sec)

MariaDB [test]> select \* from orders where purch\_amt > (select avg (purch\_amt) from orders where ord\_date ='2012-10-10');

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

| ord\_no | purch\_amt | ord\_date | customer\_id | salesman\_id |

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

| 70003 | 2480.40 | 2012-10-10 | 3009 | 5003 |

| 70005 | 2400.60 | 2012-07-27 | 3007 | 5001 |

| 70008 | 5760.00 | 2012-09-10 | 3002 | 5001 |

| 70013 | 3045.60 | 2012-04-25 | 3002 | 5001 |

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

4 rows in set (0.00 sec)

MariaDB [test]> select \* from orders where salesman\_id IN (select salesman\_id from salesman where city ='New York');

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

| ord\_no | purch\_amt | ord\_date | customer\_id | salesman\_id |

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

| 70002 | 65.26 | 2012-10-05 | 3002 | 5001 |

| 70005 | 2400.60 | 2012-07-27 | 3007 | 5001 |

| 70008 | 5760.00 | 2012-09-10 | 3002 | 5001 |

| 70013 | 3045.60 | 2012-04-25 | 3002 | 5001 |

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

4 rows in set (0.00 sec)

MariaDB [test]> select grade, count (distinct customer\_id) fro customer group by grades having grade > (select avg(grade) from customer where city = 'New york');

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'distinct customer\_id) fro customer group by grades having grade > (select avg(gr' at line 1

MariaDB [test]> select grade, count (distinct customer\_id) fro customer group by grade having grade > (select avg(grade) from customer where city = 'New york');

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'distinct customer\_id) fro customer group by grade having grade > (select avg(gra' at line 1

MariaDB [test]> select grade, count (distinct customer\_id) from customer group by grade having grade > (select avg(grade) from customer where city = 'New york');

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'distinct customer\_id) from customer group by grade having grade > (select avg(gr' at line 1

MariaDB [test]> select grade, count (distinct customer\_id) from customer group by grade having grade > (select avg(grade) from customer where city = 'New york');

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'distinct customer\_id) from customer group by grade having grade > (select avg(gr' at line 1

MariaDB [test]> select \* from customer a, orders b where a.customer\_id=b.customer\_id and b.ord\_date='2012-10-05';

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

| customer\_id | cust\_name | city | grade | salesman\_id | ord\_no | purch\_amt | ord\_date | customer\_id | salesman\_id |

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

| 3005 | Graham Zusi | California | 200 | 5002 | 70001 | 150.50 | 2012-10-05 | 3005 | 5002 |

| 3002 | Nick Rimando | New York | 100 | 5001 | 70002 | 65.26 | 2012-10-05 | 3002 | 5001 |

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

MariaDB [test]> select salesman\_id, name from salesman a where 1> (select count(\* from customer where salessman\_id=a.salesman\_id);

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'from customer where salessman\_id=a.salesman\_id)' at line 1

MariaDB [test]> select salesman\_id, name from salesman a where 1> (select count(\*) from customer where salessman\_id=a.salesman\_id);

ERROR 1054 (42S22): Unknown column 'salessman\_id' in 'where clause'

MariaDB [test]> select salesman\_id, name from salesman a where 1 < (select count(\*) from customer where salesman\_id=a.salesman\_id);

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

| salesman\_id | name |

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

| 5001 | James Hoog |

| 5002 | Nail Knite |

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

2 rows in set (0.00 sec)

MariaDB [test]> select \* from orders a where purch\_amt > (select avg(purch\_amt) from orders b where b.customer\_id=a.customer\_id);

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

| ord\_no | purch\_amt | ord\_date | customer\_id | salesman\_id |

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

| 70003 | 2480.40 | 2012-10-10 | 3009 | 5003 |

| 70007 | 948.50 | 2012-09-10 | 3005 | 5002 |

| 70008 | 5760.00 | 2012-09-10 | 3002 | 5001 |

| 70013 | 3045.60 | 2012-04-25 | 3002 | 5001 |

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

4 rows in set (0.00 sec)

MariaDB [test]> select \* from customer where grade > all (select grade from customer where city='New York);

'> select \* from customer where grade > all (select grade from customer where city='New York);

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'New York)' at line 1

MariaDB [test]> select \* from customer where grade > all (select grade from customer where city='New York);

'>

'> select \* from customer where grade > ALL(select grade from customer where city=;New York');

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

| customer\_id | cust\_name | city | grade | salesman\_id |

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

| 3001 | Brad Guzan | London | NULL | 5005 |

| 3002 | Nick Rimando | New York | 100 | 5001 |

| 3003 | Jozy Altidor | Moscow | 200 | 5007 |

| 3004 | Fabian Johnson | Paris | 300 | 5006 |

| 3005 | Graham Zusi | California | 200 | 5002 |

| 3007 | Brad Davis | New York | 200 | 5001 |

| 3008 | Julian Green | London | 300 | 5002 |

| 3009 | Geoff Cameron | Berlin | 100 | 5003 |

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

8 rows in set (0.00 sec)

MariaDB [test]> select \* from orders where purch\_amt > any (select purch\_amt from orders where ord\_date = '2012-09-10');

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

| ord\_no | purch\_amt | ord\_date | customer\_id | salesman\_id |

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

| 70003 | 2480.40 | 2012-10-10 | 3009 | 5003 |

| 70005 | 2400.60 | 2012-07-27 | 3007 | 5001 |

| 70007 | 948.50 | 2012-09-10 | 3005 | 5002 |

| 70008 | 5760.00 | 2012-09-10 | 3002 | 5001 |

| 70010 | 1983.43 | 2012-10-10 | 3004 | 5006 |

| 70013 | 3045.60 | 2012-04-25 | 3002 | 5001 |

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

6 rows in set (0.00 sec)

MariaDB [test]> SELECT AVG(grade) FROM customer WHERE city = 'New York';

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

| AVG(grade) |

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

| 150.0000 |

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

1 row in set (0.00 sec)