Practical-1

CREATE TABLE salesman(salesman_id INTEGER PRIMARY KEY,name TEXT,city
TEXT,comission float);
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', '' ,0.12);
INSERT INTO salesman VALUES (5007, 'Paul Adam', 'Rome' , 0.13);
select * from salesman;

```
+-------------+-------------+-----------+-----------+
| salesman_id | name        | city      | comission |
+-------------+-------------+-----------+-----------+
|        5001 | James Hoog  | New York  |      0.15 |
|        5002 | Nail Knite  | Paris     |      0.13 |
|        5003 | Lauson Hen  |           |      0.12 |
|        5005 | Pit Alex    | London    |      0.11 |
|        5006 | Mc Lyon     | Paris     |      0.14 |
|        5007 | Paul Adam   | Rome      |      0.13 |
+-------------+-------------+-----------+-----------+
```

CREATE TABLE customer(customer_id int primary key,customer_name text,city text,grade
int,salesman_id int,foreign key(salesman_id) references salesman(salesman_id));
INSERT INTO customer VALUES (3002, 'Nick Rimando' ,'New York', 100 ,5001);
INSERT INTO customer VALUES (3005, 'Graham Zusi', 'California' ,200 ,5002);
INSERT INTO customer VALUES (3001, 'Brad Guzan', 'London',null,null);
INSERT INTO customer VALUES (3004, 'Fabian Johnson' ,'Paris' , 300, 5006);
INSERT INTO customer VALUES (3007, 'Brad Davis', 'New York' , 200, 5001);
INSERT INTO customer VALUES (3009, 'Geoff Cameron', 'Berlin', 100, null);
INSERT INTO customer VALUES (3008 ,'Julian Green', 'London' , 300, 5002);
INSERT INTO customer VALUES (3003 ,'Jozy Altidor', 'Moscow', 200, 5007);
select * from customer;

```
+-------------+----------------+------------+-------+-------------+
| customer_id | customer_name  | city       | grade | salesman_id |
+-------------+----------------+------------+-------+-------------+
|        3001 | Brad Guzan     | London     |  NULL |        NULL |
|        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 |        NULL |
+-------------+----------------+------------+-------+-------------+
```

CREATE TABLE orders (ord_no INTEGER PRIMARY KEY,purch_amt float,ord_date date,customer_id INTEGER,foreign key(customer_id) references customer(customer_id),salesman_id INTEGER,foreign key(salesman_id) references salesman(salesman_id));
INSERT INTO orders VALUES (70001, 150.5, '2012-10-05', 3005, 5002);
INSERT INTO orders VALUES (70009, 270.65, '2012-09-10', 3001, null);
INSERT INTO orders VALUES (70002, 65.26 ,'2012-10-05' ,3002, 5001);
INSERT INTO orders VALUES (70004, 110.5, '2012-08-17', 3009, null);
INSERT INTO orders VALUES (70007, 948.5, '2012-09-10', 3005, 5002);
INSERT INTO orders VALUES (70005, 2400.6, '2012-07-27', 3007, 5001);
INSERT INTO orders VALUES (70008, 5760, '2012-09-10', 3002, 5001);
INSERT INTO orders VALUES (70010, 1983.43, '2012-10-10', 3004, 5006);
INSERT INTO orders VALUES (70003, 2480.4, '2012-10-10', 3009, null);
INSERT INTO orders VALUES (70012, 250.45, '2012-06-27', 3008, 5002);
INSERT INTO orders VALUES (70011, 75.29, '2012-08-17', 3003, 5007);
select * from orders;

```
+--------+-----------+------------+-------------+-------------+
| ord_no | purch_amt | ord_date   | customer_id | salesman_id |
+--------+-----------+------------+-------------+-------------+
|  70001 |     150.5 | 2012-10-05 |        3005 |        5002 |
|  70002 |     65.26 | 2012-10-05 |        3002 |        5001 |
|  70003 |    2480.4 | 2012-10-10 |        3009 |        NULL |
|  70004 |     110.5 | 2012-08-17 |        3009 |        NULL |
|  70005 |    2400.6 | 2012-07-27 |        3007 |        5001 |
|  70007 |     948.5 | 2012-09-10 |        3005 |        5002 |
|  70008 |      5760 | 2012-09-10 |        3002 |        5001 |
|  70009 |    270.65 | 2012-09-10 |        3001 |        NULL |
|  70010 |   1983.43 | 2012-10-10 |        3004 |        5006 |
|  70011 |     75.29 | 2012-08-17 |        3003 |        5007 |
|  70012 |    250.45 | 2012-06-27 |        3008 |        5002 |
+--------+-----------+------------+-------------+-------------+
```

Q1:

```
mysql> select name,comission from salesman;
+------------+-----------+
| name       | comission |
+------------+-----------+
| James Hoog |      0.15 |
| Nail Knite |      0.13 |
| Lauson Hen |      0.12 |
| Pit Alex   |      0.11 |
| Mc Lyon    |      0.14 |
| Paul Adam  |      0.13 |
+------------+-----------+
6 rows in set (0.00 sec)
```

Q2:
```
mysql> select distinct salesman_id from salesman;
+-------------+
| salesman_id |
+-------------+
|        5001 |
|        5002 |
|        5003 |
|        5005 |
|        5006 |
|        5007 |
+-------------+
6 rows in set (0.02 sec)
```

Q3:
```
mysql> select name,city from salesman where city = 'paris';
+------------+-------+
| name       | city  |
+------------+-------+
| Nail Knite | Paris |
| Mc Lyon    | Paris |
+------------+-------+
2 rows in set (0.00 sec)
```

Q4:
```
mysql> select * from customer where grade = 200;
+-------------+---------------+------------+-------+-------------+
| customer_id | customer_name | city       | grade | salesman_id |
+-------------+---------------+------------+-------+-------------+
|        3003 | Jozy Altidor  | Moscow     |   200 |        5007 |
|        3005 | Graham Zusi   | California |   200 |        5002 |
|        3007 | Brad Davis    | New York   |   200 |        5001 |
+-------------+---------------+------------+-------+-------------+
3 rows in set (0.00 sec)
```

Q5:
```
mysql> select ord_no,ord_date,purch_amt from orders where salesman_id = 5001;
+--------+------------+-----------+
| ord_no | ord_date   | purch_amt |
+--------+------------+-----------+
|  70002 | 2012-10-05 |     65.26 |
|  70005 | 2012-07-27 |    2400.6 |
|  70008 | 2012-09-10 |      5760 |
+--------+------------+-----------+
3 rows in set (0.01 sec)
```

Q12:

```
mysql> select * from customer where city = 'new york' or not grade>100;
+-------------+---------------+----------+-------+-------------+
| customer_id | customer_name | city     | grade | salesman_id |
+-------------+---------------+----------+-------+-------------+
|        3002 | Nick Rimando  | New York |   100 |        5001 |
|        3007 | Brad Davis    | New York |   200 |        5001 |
|        3009 | Geoff Cameron | Berlin   |   100 |        NULL |
+-------------+---------------+----------+-------+-------------+
3 rows in set (0.02 sec)
```

Q13:

```
mysql> select * from salesman where comission between 0.12 and 0.14;
+-------------+------------+-------+----------+
| salesman_id | name       | city  | comission |
+-------------+------------+-------+----------+
|        5002 | Nail Knite | Paris |     0.13 |
|        5007 | Paul Adam  | Rome  |     0.13 |
+-------------+------------+-------+----------+
2 rows in set (0.01 sec)
```

Q14:

```
mysql> select * from customer where customer_name like '%n';
+-------------+----------------+--------+-------+-------------+
| customer_id | customer_name  | city   | grade | salesman_id |
+-------------+----------------+--------+-------+-------------+
|        3001 | Brad Guzan     | London | NULL  |        NULL |
|        3004 | Fabian Johnson | Paris  |   300 |        5006 |
|        3008 | Julian Green   | London |   300 |        5002 |
|        3009 | Geoff Cameron  | Berlin |   100 |        NULL |
+-------------+----------------+--------+-------+-------------+
4 rows in set (0.01 sec)
```

Q15: mysql> select * from salesman where name like 'n_i%';

```
+-------------+------------+-------+----------+
| salesman_id | name       | city  | comission |
+-------------+------------+-------+----------+
|        5002 | Nail Knite | Paris |     0.13 |
+-------------+------------+-------+----------+
```

Q16: mysql> select * from customer where grade is NULL;

```
+-------------+---------------+--------+-------+-------------+
| customer_id | customer_name | city   | grade | salesman_id |
+-------------+---------------+--------+-------+-------------+
|        3001 | Brad Guzan    | London | NULL  |        NULL |
+-------------+---------------+--------+-------+-------------+
```

Q17: mysql> select sum(purch_amt) from orders;

```
+--------------------+
| sum(purch_amt)     |
+--------------------+
| 14495.580047607422 |
+--------------------+
```

Q18: mysql> select count(salesman_id) from orders;

```
+--------------------+
| count(salesman_id) |
+--------------------+
|                  8 |
+--------------------+
```

select count(distinct salesman_id) from orders;

```
+-----------------------------+
| count(distinct salesman_id) |
+-----------------------------+
|                           4 |
+-----------------------------+
```

Q19; mysql> select city,max(grade) from customer Group by city;

```
+------------+------------+
| city       | max(grade) |
+------------+------------+
| London     |        300 |
| New York   |        200 |
| Moscow     |        200 |
| Paris      |        300 |
| California |        200 |
| Berlin     |        100 |
+------------+------------+
```

Q20: mysql> select customer_id,max(purch_amt) from orders Group by customer_id;

```
+-------------+----------------+
| customer_id | max(purch_amt) |
+-------------+----------------+
|        3001 |         270.65 |
|        3002 |           5760 |
|        3003 |          75.29 |
|        3004 |        1983.43 |
|        3005 |          948.5 |
|        3007 |         2400.6 |
|        3008 |         250.45 |
|        3009 |         2480.4 |
+-------------+----------------+
```

Q21: mysql> select customer_id,ord_date,max(purch_amt) from orders group by customer_id,ord_date;

```
+-------------+------------+----------------+
| customer_id | ord_date   | max(purch_amt) |
+-------------+------------+----------------+
|        3005 | 2012-10-05 |          150.5 |
|        3002 | 2012-10-05 |          65.26 |
|        3009 | 2012-10-10 |         2480.4 |
|        3009 | 2012-08-17 |          110.5 |
|        3007 | 2012-07-27 |         2400.6 |
|        3005 | 2012-09-10 |          948.5 |
|        3002 | 2012-09-10 |           5760 |
|        3001 | 2012-09-10 |         270.65 |
|        3004 | 2012-10-10 |        1983.43 |
|        3003 | 2012-08-17 |          75.29 |
|        3008 | 2012-06-27 |         250.45 |
+-------------+------------+----------------+
```

Q22: mysql> select salesman_id,max(purch_amt) from orders where ord_date = '2012-08-17' group by salesman_id;

```
+-------------+----------------+
| salesman_id | max(purch_amt) |
+-------------+----------------+
|        NULL |          110.5 |
|        5007 |          75.29 |
+-------------+----------------+
```

Q23: mysql> select customer_id,ord_date,max(purch_amt) from orders group by customer_id,ord_date having max(purch_amt)>2000;

```
+-------------+------------+----------------+
| customer_id | ord_date   | max(purch_amt) |
+-------------+------------+----------------+
|        3009 | 2012-10-10 |         2480.4 |
|        3007 | 2012-07-27 |         2400.6 |
|        3002 | 2012-09-10 |           5760 |
+-------------+------------+----------------+
```

Q24: mysql> select count(*) from orders where ord_date= '2012-08-17';

```
+----------+
| count(*) |
+----------+
|        2 |
+----------+
```