

1. create a view for those salespersons belong to the city 'New York'.

```
mysql> create view saleman_view as select salesman_id,name,city,commission from salesman
where city = "New york";
```

Query OK, 0 rows affected (0.01 sec)

```
mysql>
```

```
mysql> select * from saleman_view;
```

salesman_id	name	city	commission
5001	James hoog	New York	0.15

1 row in set (0.01 sec)

2. create a view for all salespersons. Return salesperson ID, name, and city.

```
mysql> create view saleman_view1 as select salesman_id,name,city from salesman ;
```

Query OK, 0 rows affected (0.01 sec)

```
mysql> select * from saleman_view1;
```

salesman_id	name	city
5001	James hoog	New York
5002	Nail Knite	Paris
5005	Pit Alex	London
5006	Mc lyon	paris
5007	Paul Aam	Rome
5003	Lauson Hen	San jose

6 rows in set (0.00 sec)

3. create a view to count the number of customers in each grade.

```
mysql> create view customers_grade_count as select grade,count(*) as count from customers
group by grade;
```

Query OK, 0 rows affected (0.01 sec)

```
mysql> select * from customers_grade_count;
```

grade	count
100	2

200	3
300	2
NULL	1

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

4 rows in set (0.00 sec)

4. create a view to count the number of unique customer, compute average and total purchase amount of customer orders by each date.

```
mysql> CREATE VIEW customer_purchase_stats AS
-> SELECT
->   ord_date,
->   COUNT(DISTINCT orders.customer_id) as unique_customers,
->   AVG(purch_amt) as avg_purchase_amt,
->   SUM(purch_amt) as total_purchase_amt
-> FROM orders
-> JOIN customers ON orders.customer_id = customers.customer_id
-> GROUP BY ord_date;
```

Query OK, 0 rows affected (0.01 sec)

```
mysql> select * from customer_purchase_stats;
```

ord_date	unique_customers	avg_purchase_amt	total_purchase_amt
2012-04-25	1	3045.60009765625	3045.60009765625
2012-06-27	1	250.4499969482422	250.4499969482422
2012-07-27	1	2400.60009765625	2400.60009765625
2012-08-17	2	92.89500045776367	185.79000091552734
2012-09-10	3	2326.383331298828	6979.149993896484
2012-10-05	2	107.88000106811523	215.76000213623047
2012-10-10	2	2231.9149780273438	4463.8299560546875

+-----+-----+
7 rows in set (0.02 sec)

5., create a view to get the salesperson and customer by name. Return order name, purchase amount, salesperson ID, name, customer name.

```
mysql> CREATE VIEW order_details AS
-> SELECT
->   orders.ord_no,
->   orders.purch_amt,
->   salesman.salesman_id as salesperson_id,
```

```

->
-> customers.cust_name as customer_name
-> FROM orders
-> JOIN salesman ON orders.salesman_id = salesman.salesman_id
-> JOIN customers ON orders.customer_id = customers.customer_id;
Query OK, 0 rows affected (0.01 sec)

```

```
mysql> select * from order_details;
```

```

+-----+-----+-----+-----+
| ord_no | purch_amt | salesperson_id | customer_name |
+-----+-----+-----+-----+
| 70013 | 3045.6 | 5001 | Nick Rimando |
| 70008 | 5760 | 5001 | Nick Rimando |
| 70002 | 65.26 | 5001 | Nick Rimando |
| 70007 | 948.5 | 5002 | graham davis |
| 70001 | 150.5 | 5002 | graham davis |
| 70012 | 250.45 | 5002 | julian green |
| 70010 | 1983.43 | 5006 | fabian johnson |
| 70003 | 2480.4 | 5003 | Geoff Cameron |
| 70004 | 110.5 | 5003 | Geoff Cameron |
| 70011 | 75.29 | 5007 | Jozy altidor |
| 70009 | 270.65 | 5005 | Brad Guzan |
| 70005 | 2400.6 | 5001 | Brad Davis |
+-----+-----+-----+-----+

```

12 rows in set (0.00 sec)

6.create a view to find all the customers who have the highest grade. Return all the fields of customer.

```

mysql> CREATE VIEW top_customers AS
-> SELECT *
-> FROM customers
-> WHERE grade = (
-> SELECT MAX(grade) FROM customers
-> );

```

Query OK, 0 rows affected (0.01 sec)

```
mysql> select * from top_customers;
```

```

+-----+-----+-----+-----+-----+
| customer_id | cust_name | city | grade | salesman_id |
+-----+-----+-----+-----+-----+
| 3008 | julian green | london | 300 | 5002 |
| 3004 | fabian johnson | paris | 300 | 5006 |
+-----+-----+-----+-----+-----+

```

2 rows in set (0.00 sec)

7.create a view to count number of the salesperson in each city. Return city, number of salespersons.

```
mysql> CREATE VIEW salesperson_count AS
-> SELECT city, COUNT(*) as count
-> FROM salesman
-> GROUP BY city;
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> select * from salesperson_count;
```

```
+-----+-----+
| city   | count |
+-----+-----+
| New York | 1 |
| Paris   | 2 |
| London  | 1 |
| Rome    | 1 |
| San jose | 1 |
+-----+-----+
```

5 rows in set (0.00 sec)

8.create a view to compute average purchase amount and total purchase amount for each salesperson.
Return name, average purchase and total purchase amount. (Assume all names are unique).

```
mysql> CREATE VIEW salesman_purchase_stats AS
-> SELECT
->   salesman.name,
->   AVG(orders.purch_amt) as avg_purchase_amount,
->   SUM(orders.purch_amt) as total_purchase_amount
-> FROM orders
-> JOIN salesman ON orders.salesman_id = salesman.salesman_id
-> GROUP BY salesman.name;
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> select * from salesman_purchase_stats;
```

```
+-----+-----+-----+
| name      | avg_purchase_amount | total_purchase_amount |
+-----+-----+-----+
| Nail Knite | 449.81666564941406 | 1349.4499969482422 |
| Pit Alex   | 270.6499938964844 | 270.6499938964844 |
| James hoog | 2817.8650493621826 | 11271.46019744873 |
```

Lauson Hen	1295.449951171875	2590.89990234375
Mc lyon	1983.4300537109375	1983.4300537109375
Paul Aam	75.29000091552734	75.29000091552734

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

6 rows in set (0.00 sec)

9.create a view to find those salespeople who handle more than one customer. Return all the fields of salesperson.

```
mysql> CREATE VIEW salesman_multi_customers AS
-> SELECT salesman.*
-> FROM salesman
-> WHERE salesman.salesman_id IN (
-> SELECT salesman_id
-> FROM orders
-> GROUP BY salesman_id
-> HAVING COUNT(DISTINCT customer_id) > 1
-> );
```

Query OK, 0 rows affected (0.01 sec)

```
mysql> select * from salesman_multi_customers;
```

salesman_id	name	city	commission
5001	James hoog	New York	0.15
5002	Nail Knite	Paris	0.13

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

2 rows in set (0.00 sec)