**\*\*\*\*\*DATA CREATION\*\*\*\*\***

mysql> CREATE DATABASE Test;

Query OK, 1 row affected (0.14 sec)

mysql> USE Test;

Database changed

**\*\*Create Employee Table :**

mysql> CREATE TABLE employee (employeeNumber INT,

-> firstName VARCHAR(15),

-> officeCode INT,

-> reportsTo INT,

-> jobTitle VARCHAR(20));

Query OK, 0 rows affected (1.09 sec)

mysql> INSERT INTO employee VALUES (1002,'Murphy',1,NULL,'President');

Query OK, 1 row affected (0.13 sec)

mysql> INSERT INTO employee VALUES (1056,'Patterson',1,1002,'VP Sales');

Query OK, 1 row affected (0.25 sec)

mysql> INSERT INTO employee VALUES (1088,'William',6,1056,'Sales Manager(APAC)');

Query OK, 1 row affected (0.10 sec)

mysql> INSERT INTO employee VALUES (1102,'Gerard',4,1056,'Sales Manager(EMEA)');

Query OK, 1 row affected (0.12 sec)

mysql> INSERT INTO employee VALUES (1143,'Anthony',1,1056,'Sales Manager(NA)');

Query OK, 1 row affected (0.10 sec)

mysql> INSERT INTO employee VALUES (1166,'Leslie',1,1143,'Sales Rep');

Query OK, 1 row affected (0.07 sec)

mysql> INSERT INTO employee VALUES (1188,'Julie',2,1143,'Sales Rep');

Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO employee VALUES (1216,'Steve',2,1143,'Sales Rep');

Query OK, 1 row affected (0.05 sec)

mysql> INSERT INTO employee VALUES (1286,'Foon Yue',2,1143,'Sales Rep');

Query OK, 1 row affected (0.07 sec)

mysql> INSERT INTO employee VALUES (1323,'George',2,1143,'Sales Rep');

Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO employee VALUES (1370,'Gerard',2,1102,'Sales Rep');

Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO employee VALUES (1401,'Pamela',2,1102,'Sales Rep');

Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO employee VALUES (1504,'Larry',2,1102,'Sales Rep');

Query OK, 1 row affected (0.07 sec)

mysql> INSERT INTO employee VALUES (1612,'Peter',2,1088,'Sales Rep');

Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO employee VALUES (1702,'Martin',4,1102,'Sales Rep');

Query OK, 1 row affected (0.04 sec)

mysql> SELECT\*FROM employee;

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

| employeeNumber | firstName | officeCode | reportsTo | jobTitle |

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

| 1002 | Murphy | 1 | NULL | President |

| 1056 | Patterson | 1 | 1002 | VP Sales |

| 1088 | William | 6 | 1056 | Sales Manager(APAC) |

| 1102 | Gerard | 4 | 1056 | Sales Manager(EMEA) |

| 1143 | Anthony | 1 | 1056 | Sales Manager(NA) |

| 1166 | Leslie | 1 | 1143 | Sales Rep |

| 1188 | Julie | 2 | 1143 | Sales Rep |

| 1216 | Steve | 2 | 1143 | Sales Rep |

| 1286 | Foon Yue | 2 | 1143 | Sales Rep |

| 1323 | George | 2 | 1143 | Sales Rep |

| 1370 | Gerard | 2 | 1102 | Sales Rep |

| 1401 | Pamela | 2 | 1102 | Sales Rep |

| 1504 | Larry | 2 | 1102 | Sales Rep |

| 1612 | Peter | 2 | 1088 | Sales Rep |

| 1702 | Martin | 4 | 1102 | Sales Rep |

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

15 rows in set (0.00 sec)

**\*\*Create Customer Table :**

mysql> CREATE TABLE customer (customerNumber INT,

-> customerName VARCHAR(30),

-> phone VARCHAR(15),

-> city VARCHAR(15),

-> country VARCHAR(15),

-> salesRep INT);

Query OK, 0 rows affected (0.43 sec)

mysql> INSERT INTO customer VALUES (121,'Baane Mini Imports',

-> '07-98 9555','Stavern','Norway', 1504);

Query OK, 1 row affected (0.10 sec)

mysql> INSERT INTO customer VALUES (131,'Land of Toys Inc.',

-> '2125557818','NYC','USA', 1323);

Query OK, 1 row affected (0.10 sec)

mysql> INSERT INTO customer VALUES (141,'Euto+ Shopping Channel',

-> '(91) 555 94 44','Madrid','Spain', 1370);

Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO customer VALUES (145,'Danish Wholesale Imports',

-> '31 12 3555','Kobenhavn','Denmark', 1401);

Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO customer VALUES (181,'Vitachrome Inc.',

-> '2125551500','NYC','USA', 1286);

Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO customer VALUES (278,'Rovelli gifts',

-> '035-640555','Bergamo','Italy', 1401);

Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO customer VALUES (363,'Online Diecast Co.',

-> '6035558647','Nashua','USA', 1216);

Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO customer VALUES (385,'Cruz & Sons Co.',

-> '+63 2 555 3587','Makati City','Philippines', 1612);

Query OK, 1 row affected (0.08 sec)

mysql> INSERT INTO customer VALUES (486,'Mint Distributors Inc.',

-> '2155559857','Philadelphia','USA', 1323);

Query OK, 1 row affected (0.09 sec)

mysql> Select \*FROM customer;

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

| customerNumber | customerName | phone | city | country | salesRep |

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

| 121 | Baane Mini Imports | 07-98 9555 | Stavern | Norway | 1504 |

| 131 | Land of Toys Inc. | 2125557818 | NYC | USA | 1323 |

| 141 | Euto+ Shopping Channel | (91) 555 94 44 | Madrid | Spain | 1370 |

| 145 | Danish Wholesale Imports | 31 12 3555 | Kobenhavn | Denmark | 1401 |

| 181 | Vitachrome Inc. | 2125551500 | NYC | USA | 1286 |

| 278 | Rovelli gifts | 035-640555 | Bergamo | Italy | 1401 |

| 363 | Online Diecast Co. | 6035558647 | Nashua | USA | 1216 |

| 385 | Cruz & Sons Co. | +63 2 555 3587 | Makati City | Philippines | 1612 |

| 486 | Mint Distributors Inc. | 2155559857 | Philadelphia | USA | 1323 |

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

9 rows in set (0.00 sec)

**\*\*Create OrderTable Table :**

mysql> CREATE TABLE OrderTable(orderNumber INT,

-> orderDate DATE,

-> customerNumber INT);

Query OK, 0 rows affected (0.42 sec)

mysql> INSERT INTO OrderTable VALUES (10100,'2003-01-06', 363);

Query OK, 1 row affected (0.10 sec)

mysql> INSERT INTO OrderTable VALUES (10101,'2003-01-09', 128);

Query OK, 1 row affected (0.17 sec)

mysql> INSERT INTO OrderTable VALUES (10102,'2003-01-10', 181);

Query OK, 1 row affected (0.09 sec)

mysql> INSERT INTO OrderTable VALUES (10103,'2003-01-29', 121);

Query OK, 1 row affected (0.05 sec)

mysql> INSERT INTO OrderTable VALUES (10104,'2003-01-31', 141);

Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO OrderTable VALUES (10105,'2003-02-11', 145);

Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO OrderTable VALUES (10106,'2003-02-17', 278);

Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO OrderTable VALUES (10107,'2003-02-24', 131);

Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO OrderTable VALUES (10108,'2003-03-03', 385);

Query OK, 1 row affected (0.07 sec)

mysql> INSERT INTO OrderTable VALUES (10109,'2003-03-10', 486);

Query OK, 1 row affected (0.05 sec)

mysql> INSERT INTO OrderTable VALUES (10110,'2003-03-18', 187);

Query OK, 1 row affected (0.05 sec)

mysql> Select \*From OrderTable;

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

| orderNumber | orderDate | customerNumber |

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

| 10100 | 2003-01-06 | 363 |

| 10101 | 2003-01-09 | 128 |

| 10102 | 2003-01-10 | 181 |

| 10103 | 2003-01-29 | 121 |

| 10104 | 2003-01-31 | 141 |

| 10105 | 2003-02-11 | 145 |

| 10106 | 2003-02-17 | 278 |

| 10107 | 2003-02-24 | 131 |

| 10108 | 2003-03-03 | 385 |

| 10109 | 2003-03-10 | 486 |

| 10110 | 2003-03-18 | 187 |

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

11 rows in set (0.00 sec)

**\*\*Create OrderDetails Table :**

mysql> CREATE TABLE OrderDetails(orderNumber INT,

-> productCode VARCHAR(3),

-> price FLOAT(5));

Query OK, 0 rows affected (0.51 sec)

mysql> INSERT INTO OrderDetails VALUES (10100,'S10',136.00);

Query OK, 1 row affected (0.09 sec)

mysql> INSERT INTO OrderDetails VALUES (10100,'S11',55.09);

Query OK, 1 row affected (0.14 sec)

mysql> INSERT INTO OrderDetails VALUES (10101,'S10',32.53);

Query OK, 1 row affected (0.10 sec)

mysql> INSERT INTO OrderDetails VALUES (10101,'S13',44.35);

Query OK, 1 row affected (0.05 sec)

mysql> INSERT INTO OrderDetails VALUES (10102,'S12',95.55);

Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO OrderDetails VALUES (10102,'S14',43.13);

Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO OrderDetails VALUES (10103,'S11',63.35);

Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO OrderDetails VALUES (10103,'S12',94.07);

Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO OrderDetails VALUES (10104,'S10',114.59);

Query OK, 1 row affected (0.10 sec)

mysql> INSERT INTO OrderDetails VALUES (10104,'S11',53.31);

Query OK, 1 row affected (0.07 sec)

mysql> Select \*From OrderDetails;

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

| orderNumber | productCode | price |

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

| 10100 | S10 | 136 |

| 10100 | S11 | 55.09 |

| 10101 | S10 | 32.53 |

| 10101 | S13 | 44.35 |

| 10102 | S12 | 95.55 |

| 10102 | S14 | 43.13 |

| 10103 | S11 | 63.35 |

| 10103 | S12 | 94.07 |

| 10104 | S10 | 114.59 |

| 10104 | S11 | 53.31 |

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

10 rows in set (0.00 sec)

**\*\*Create ProductDetails Table :**

mysql> CREATE TABLE ProductDetails(productCode VARCHAR(3),

-> productName VARCHAR(20),

-> quantity INT,

-> buyPrice FLOAT(4));

Query OK, 0 rows affected (1.19 sec)

mysql> INSERT INTO ProductDetails VALUES ('S10','Harley Davidson', 7933, 48.81);

Query OK, 1 row affected (0.09 sec)

mysql> INSERT INTO ProductDetails VALUES ('S11','Alpine Renault', 7305, 98.58);

Query OK, 1 row affected (0.09 sec)

mysql> INSERT INTO ProductDetails VALUES ('S12','Moto Guzzi', 6625, 68.99);

Query OK, 1 row affected (0.08 sec)

mysql> INSERT INTO ProductDetails VALUES ('S13','Eagle Drag Bike', 5582, 91.02);

Query OK, 1 row affected (0.04 sec)

mysql> INSERT INTO ProductDetails VALUES ('S14','Alfa Romeo GTA', 3252, 85.68);

Query OK, 1 row affected (0.07 sec)

mysql> Select \*From ProductDetails;

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

| productCode | productName | quantity | buyPrice |

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

| S10 | Harley Davidson | 7933 | 48.81 |

| S11 | Alpine Renault | 7305 | 98.58 |

| S12 | Moto Guzzi | 6625 | 68.99 |

| S13 | Eagle Drag Bike | 5582 | 91.02 |

| S14 | Alfa Romeo GTA | 3252 | 85.68 |

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

5 rows in set (0.00 sec)

**\*\*Create OfficeDetails Table :**

mysql> CREATE TABLE OfficeDetails(officeCode INT,

-> City VARCHAR(20),

-> Country VARCHAR(15),

-> postalCode INT);

Query OK, 0 rows affected (0.46 sec)

mysql> INSERT INTO OfficeDetails VALUES (1,'San Francisco','USA', 94080);

Query OK, 1 row affected (0.09 sec)

mysql> INSERT INTO OfficeDetails VALUES (2,'Boston','USA', 02107);

Query OK, 1 row affected (0.14 sec)

mysql> INSERT INTO OfficeDetails VALUES (3,'NYC','USA', 10022);

Query OK, 1 row affected (0.05 sec)

mysql> INSERT INTO OfficeDetails VALUES (4,'Paris','France', 75017);

Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO OfficeDetails VALUES (5,'Tokyo','Japan', 10278);

Query OK, 1 row affected (0.07 sec)

mysql> INSERT INTO OfficeDetails VALUES (6,'Sydney','Australia', 23510);

Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO OfficeDetails VALUES (7,'London','UK', 63437);

Query OK, 1 row affected (0.07 sec)

mysql> Select \*From OfficeDetails;

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

| officeCode | City | Country | postalCode |

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

| 1 | San Francisco | USA | 94080 |

| 2 | Boston | USA | 2107 |

| 3 | NYC | USA | 10022 |

| 4 | Paris | France | 75017 |

| 5 | Tokyo | Japan | 10278 |

| 6 | Sydney | Australia | 23510 |

| 7 | London | UK | 63437 |

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

7 rows in set (0.00 sec)

**\*\*\*\*\*DATA EXPORT\*\*\*\*\***

mysql> SELECT \* FROM employee

-> INTO OUTFILE 'E:/employee.txt';

ERROR 1290 (HY000): The MySQL server is running with the --secure-file-priv option so it cannot execute this statement

mysql> SHOW VARIABLES LIKE "secure\_file\_priv";

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

| Variable\_name | Value |

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

| secure\_file\_priv | C:\ProgramData\MySQL\MySQL Server 8.0\Uploads\ |

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

1 row in set (0.01 sec)

mysql> SELECT \* FROM employee INTO OUTFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/employee.txt' FIELDS TERMINATED BY ',';

Query OK, 15 rows affected (0.16 sec)

mysql> SELECT \* FROM customer INTO OUTFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/customer.txt' FIELDS TERMINATED BY ',';

Query OK, 9 rows affected (0.06 sec)

mysql> SELECT \* FROM OrderTable INTO OUTFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/ordertable.txt' FIELDS TERMINATED BY ',';

Query OK, 11 rows affected (0.33 sec)

mysql> SELECT \* FROM OrderDetails INTO OUTFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/orderdetails.txt' FIELDS TERMINATED BY ',';

Query OK, 10 rows affected (0.19 sec)

mysql> SELECT \* FROM ProductDetails INTO OUTFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/productdetails.txt' FIELDS TERMINATED BY ',';

Query OK, 5 rows affected (0.10 sec)

mysql> SELECT \* FROM OfficeDetails INTO OUTFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/officedetails.txt' FIELDS TERMINATED BY ',';

Query OK, 7 rows affected (0.14 sec)

**\*\*\*\*\*DATA IMPORT\*\*\*\*\***

mysql> CREATE DATABASE NitishBhattacharjee;

Query OK, 1 row affected (0.34 sec)

mysql> USE NitishBhattacharjee;

Database changed

mysql> SHOW TABLES;

Empty set (0.39 sec)

mysql> CREATE TABLE employee (employeeNumber INT,firstName VARCHAR(15),officeCode INT,reportsTo INT,jobTitle VARCHAR(20));

Query OK, 0 rows affected (0.63 sec)

mysql> CREATE TABLE customer (customerNumber INT,customerName VARCHAR(30),phone VARCHAR(15),city VARCHAR(15),country VARCHAR(15),salesRep INT);

Query OK, 0 rows affected (0.43 sec)

mysql> CREATE TABLE OrderTable(orderNumber INT,orderDate DATE,customerNumber INT);

Query OK, 0 rows affected (0.40 sec)

mysql> CREATE TABLE OrderDetails(orderNumber INT,productCode VARCHAR(3),price FLOAT(5));

Query OK, 0 rows affected (0.56 sec)

mysql> CREATE TABLE ProductDetails(productCode VARCHAR(3),productName VARCHAR(20),quantity INT,buyPrice FLOAT(4));

Query OK, 0 rows affected (0.54 sec)

mysql> CREATE TABLE OfficeDetails(officeCode INT,City VARCHAR(20),Country VARCHAR(15),postalCode INT);

Query OK, 0 rows affected (0.57 sec)

mysql> LOAD DATA INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/employee.txt' INTO TABLE employee FIELDS TERMINATED BY ',';

Query OK, 15 rows affected (0.18 sec)

Records: 15 Deleted: 0 Skipped: 0 Warnings: 0

mysql> LOAD DATA INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/customer.txt' INTO TABLE customer FIELDS TERMINATED BY ',';

Query OK, 9 rows affected (0.16 sec)

Records: 9 Deleted: 0 Skipped: 0 Warnings: 0

mysql> LOAD DATA INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/officedetails.txt' INTO TABLE OfficeDetails FIELDS TERMINATED BY ',';

Query OK, 7 rows affected (0.13 sec)

Records: 7 Deleted: 0 Skipped: 0 Warnings: 0

mysql> LOAD DATA INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/orderdetails.txt' INTO TABLE OrderDetails FIELDS TERMINATED BY ',';

Query OK, 10 rows affected (0.13 sec)

Records: 10 Deleted: 0 Skipped: 0 Warnings: 0

mysql> LOAD DATA INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/ordertable.txt' INTO TABLE OrderTable FIELDS TERMINATED BY ',';

Query OK, 11 rows affected (0.18 sec)

Records: 11 Deleted: 0 Skipped: 0 Warnings: 0

mysql> LOAD DATA INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/productdetails.txt' INTO TABLE ProductDetails FIELDS TERMINATED BY ',';

Query OK, 5 rows affected (0.18 sec)

Records: 5 Deleted: 0 Skipped: 0 Warnings: 0

mysql> SHOW TABLES;

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

| Tables\_in\_nitishbhattacharjee |

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

| customer |

| employee |

| officedetails |

| orderdetails |

| ordertable |

| productdetails |

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

6 rows in set (0.04 sec)

**Q1. Create view table vview1 from Employee table with attributes Employee number, First names, job title in which employee number is less than 1500 and show view table.**

mysql> CREATE VIEW vview1 AS SELECT employeeNumber,firstName,jobTitle FROM employee WHERE employeeNumber<1500;

Query OK, 0 rows affected (0.14 sec)

mysql> SELECT \*FROM vview1;

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

| employeeNumber | firstName | jobTitle |

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

| 1002 | Murphy | President |

| 1056 | Patterson | VP Sales |

| 1088 | William | Sales Manager(APAC) |

| 1102 | Gerard | Sales Manager(EMEA) |

| 1143 | Anthony | Sales Manager(NA) |

| 1166 | Leslie | Sales Rep |

| 1188 | Julie | Sales Rep |

| 1216 | Steve | Sales Rep |

| 1286 | Foon Yue | Sales Rep |

| 1323 | George | Sales Rep |

| 1370 | Gerard | Sales Rep |

| 1401 | Pamela | Sales Rep |

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

12 rows in set (0.00 sec)

**Q2. Create view table vview2 from Employee table where first name is in lexicographical order and show view table.**

mysql> CREATE VIEW vview2 AS SELECT \* FROM employee ORDER BY firstName;

Query OK, 0 rows affected (0.14 sec)

mysql> SELECT \*FROM vview2;

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

| employeeNumber | firstName | officeCode | reportsTo | jobTitle |

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

| 1143 | Anthony | 1 | 1056 | Sales Manager(NA) |

| 1286 | Foon Yue | 2 | 1143 | Sales Rep |

| 1323 | George | 2 | 1143 | Sales Rep |

| 1102 | Gerard | 4 | 1056 | Sales Manager(EMEA) |

| 1370 | Gerard | 2 | 1102 | Sales Rep |

| 1188 | Julie | 2 | 1143 | Sales Rep |

| 1504 | Larry | 2 | 1102 | Sales Rep |

| 1166 | Leslie | 1 | 1143 | Sales Rep |

| 1702 | Martin | 4 | 1102 | Sales Rep |

| 1002 | Murphy | 1 | NULL | President |

| 1401 | Pamela | 2 | 1102 | Sales Rep |

| 1056 | Patterson | 1 | 1002 | VP Sales |

| 1612 | Peter | 2 | 1088 | Sales Rep |

| 1216 | Steve | 2 | 1143 | Sales Rep |

| 1088 | William | 6 | 1056 | Sales Manager(APAC) |

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

15 rows in set (0.00 sec)

**Q3. Create view vview3 from employee table and customer table having attributes customer name ,sales representative and their job title.**

mysql> CREATE VIEW vview3 AS

-> SELECT c.customerName,c.SalesRep,e.jobTitle

-> FROM employee e, customer c WHERE e.employeeNumber=c.salesRep;

Query OK, 0 rows affected (0.13 sec)

mysql> SELECT \*FROM vview3;

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

| customerName | SalesRep | jobTitle |

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

| Online Diecast Co. | 1216 | Sales Rep |

| Vitachrome Inc. | 1286 | Sales Rep |

| Land of Toys Inc. | 1323 | Sales Rep |

| Mint Distributors Inc. | 1323 | Sales Rep |

| Euto+ Shopping Channel | 1370 | Sales Rep |

| Danish Wholesale Imports | 1401 | Sales Rep |

| Rovelli gifts | 1401 | Sales Rep |

| Baane Mini Imports | 1504 | Sales Rep |

| Cruz & Sons Co. | 1612 | Sales Rep |

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

9 rows in set (0.00 sec)

**Q4. Delete employee number=1143 from view vview1.**

mysql> DELETE FROM vview1 WHERE employeeNumber = 1143;

Query OK, 1 row affected (0.09 sec)

mysql> SELECT \* FROM vview1;

| employeeNumber | firstName | jobTitle |

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

| 1002 | Murphy | President |

| 1056 | Patterson | VP Sales |

| 1088 | William | Sales Manager(APAC) |

| 1102 | Gerard | Sales Manager(EMEA) |

| 1166 | Leslie | Sales Rep |

| 1188 | Julie | Sales Rep |

| 1216 | Steve | Sales Rep |

| 1286 | Foon Yue | Sales Rep |

| 1323 | George | Sales Rep |

| 1370 | Gerard | Sales Rep |

| 1401 | Pamela | Sales Rep |

| 1420 | Maria | Salesrep |

12 rows in set (0.00 sec)

mysql> SELECT \* FROM employee;

| employeeNumber | firstName | officeCode | reportsTo | jobTitle |

| 1002 | Murphy | 1 | NULL | President |

| 1056 | Patterson | 1 | 1002 | VP Sales |

| 1088 | William | 6 | 1056 | Sales Manager(APAC) |

| 1102 | Gerard | 4 | 1056 | Sales Manager(EMEA) |

| 1166 | Leslie | 1 | 1143 | Sales Rep |

| 1188 | Julie | 2 | 1143 | Sales Rep |

| 1216 | Steve | 2 | 1143 | Sales Rep |

| 1286 | Foon Yue | 2 | 1143 | Sales Rep |

| 1323 | George | 2 | 1143 | Sales Rep |

| 1370 | Gerard | 2 | 1102 | Sales Rep |

| 1401 | Pamela | 2 | 1102 | Sales Rep |

| 1504 | Larry | 2 | 1102 | Sales Rep |

| 1612 | Peter | 2 | 1088 | Sales Rep |

| 1702 | Martin | 4 | 1102 | Sales Rep |

| 1420 | Maria | NULL | NULL | Salesrep |

15 rows in set (0.00 sec)

**Q5.Update office code in view vview2.**

mysql> UPDATE vview2 SET officeCode = 1 WHERE firstName = 'Maria';

mysql> SELECT \* FROM vview2;

| employeeNumber | firstName | officeCode | reportsTo | jobTitle |

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

| 1286 | Foon Yue | 2 | 1143 | Sales Rep |

| 1323 | George | 2 | 1143 | Sales Rep |

| 1102 | Gerard | 4 | 1056 | Sales Manager(EMEA) |

| 1370 | Gerard | 2 | 1102 | Sales Rep |

| 1188 | Julie | 2 | 1143 | Sales Rep |

| 1504 | Larry | 2 | 1102 | Sales Rep |

| 1166 | Leslie | 1 | 1143 | Sales Rep |

| 1420 | Maria | 1 | NULL | Salesrep |

| 1702 | Martin | 4 | 1102 | Sales Rep |

| 1002 | Murphy | 1 | NULL | President |

| 1401 | Pamela | 2 | 1102 | Sales Rep |

| 1056 | Patterson | 1 | 1002 | VP Sales |

| 1612 | Peter | 2 | 1088 | Sales Rep |

| 1216 | Steve | 2 | 1143 | Sales Rep |

| 1088 | William | 6 | 1056 | Sales Manager(APAC) |

mysql> SELECT \* FROM employee;

| employeeNumber | firstName | officeCode | reportsTo | jobTitle |

| 1002 | Murphy | 1 | NULL | President |

| 1056 | Patterson | 1 | 1002 | VP Sales |

| 1088 | William | 6 | 1056 | Sales Manager(APAC) |

| 1102 | Gerard | 4 | 1056 | Sales Manager(EMEA) |

| 1166 | Leslie | 1 | 1143 | Sales Rep |

| 1188 | Julie | 2 | 1143 | Sales Rep |

| 1216 | Steve | 2 | 1143 | Sales Rep |

| 1286 | Foon Yue | 2 | 1143 | Sales Rep |

| 1323 | George | 2 | 1143 | Sales Rep |

| 1370 | Gerard | 2 | 1102 | Sales Rep |

| 1401 | Pamela | 2 | 1102 | Sales Rep |

| 1504 | Larry | 2 | 1102 | Sales Rep |

| 1612 | Peter | 2 | 1088 | Sales Rep |

| 1702 | Martin | 4 | 1102 | Sales Rep |

| 1420 | Maria | 1 | NULL | Salesrep |

**Q6. Insert a row (1420,’Maria’,’Salesrep’,3) in view vview1 .**

mysql> INSERT INTO vview1 VALUES (1420,'Maria','Salesrep');

Query OK, 1 row affected (0.52 sec)

mysql> SELECT \* FROM vview1;

| employeeNumber | firstName | jobTitle |

| 1002 | Murphy | President |

| 1056 | Patterson | VP Sales |

| 1088 | William | Sales Manager(APAC) |

| 1102 | Gerard | Sales Manager(EMEA) |

| 1143 | Anthony | Sales Manager(NA) |

| 1166 | Leslie | Sales Rep |

| 1188 | Julie | Sales Rep |

| 1216 | Steve | Sales Rep |

| 1286 | Foon Yue | Sales Rep |

| 1323 | George | Sales Rep |

| 1370 | Gerard | Sales Rep |

| 1401 | Pamela | Sales Rep |

| 1420 | Maria | Salesrep |

mysql> SELECT \* FROM employee;

| employeeNumber | firstName | officeCode | reportsTo | jobTitle |

| 1002 | Murphy | 1 | NULL | President |

| 1056 | Patterson | 1 | 1002 | VP Sales |

| 1088 | William | 6 | 1056 | Sales Manager(APAC) |

| 1102 | Gerard | 4 | 1056 | Sales Manager(EMEA) |

| 1143 | Anthony | 1 | 1056 | Sales Manager(NA) |

| 1166 | Leslie | 1 | 1143 | Sales Rep |

| 1188 | Julie | 2 | 1143 | Sales Rep |

| 1216 | Steve | 2 | 1143 | Sales Rep |

| 1286 | Foon Yue | 2 | 1143 | Sales Rep |

| 1323 | George | 2 | 1143 | Sales Rep |

| 1370 | Gerard | 2 | 1102 | Sales Rep |

| 1401 | Pamela | 2 | 1102 | Sales Rep |

| 1504 | Larry | 2 | 1102 | Sales Rep |

| 1612 | Peter | 2 | 1088 | Sales Rep |

| 1702 | Martin | 4 | 1102 | Sales Rep |

| 1420 | Maria | NULL | NULL | Salesrep |

16 rows in set (0.00 sec)

**Q 7. Delete rows from vview1 having office code 6.**

mysql> DELETE FROM vview1 WHERE employeeNumber IN (SELECT employeeNumber FROM employee WHERE officeCode = 6);

| employeeNumber | firstName | jobTitle |

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

| 1002 | Murphy | President |

| 1056 | Patterson | VP Sales |

| 1102 | Gerard | Sales Manager(EMEA) |

| 1143 | Anthony | Sales Manager(NA) |

| 1166 | Leslie | Sales Rep |

| 1188 | Julie | Sales Rep |

| 1216 | Steve | Sales Rep |

| 1286 | Foon Yue | Sales Rep |

| 1323 | George | Sales Rep |

| 1370 | Gerard | Sales Rep |

| 1401 | Pamela | Sales Rep |

| 1420 | Maria | Salesrep |

12 rows in set (0.08 sec)

mysql> SELECT \* FROM employee;

| employeeNumber | firstName | officeCode | reportsTo | jobTitle |

| 1002 | Murphy | 1 | NULL | President |

| 1056 | Patterson | 1 | 1002 | VP Sales |

| 1102 | Gerard | 4 | 1056 | Sales Manager(EMEA) |

| 1143 | Anthony | 1 | 1056 | Sales Manager(NA) |

| 1166 | Leslie | 1 | 1143 | Sales Rep |

| 1188 | Julie | 2 | 1143 | Sales Rep |

| 1216 | Steve | 2 | 1143 | Sales Rep |

| 1286 | Foon Yue | 2 | 1143 | Sales Rep |

| 1323 | George | 2 | 1143 | Sales Rep |

| 1370 | Gerard | 2 | 1102 | Sales Rep |

| 1401 | Pamela | 2 | 1102 | Sales Rep |

| 1504 | Larry | 2 | 1102 | Sales Rep |

| 1612 | Peter | 2 | 1088 | Sales Rep |

| 1702 | Martin | 4 | 1102 | Sales Rep |

| 1420 | Maria | NULL | NULL | Salesrep |

**Q 8. Delete vview1;**

mysql> DROP VIEW vview1;

Query OK, 0 rows affected (0.21 sec)

mysql> SELECT \* FROM vview1;

ERROR 1146 (42S02): Table 'nitishbhattacharjee.vview1' doesn't exist

mysql> SELECT \* FROM employee;

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

| employeeNumber | firstName | officeCode | reportsTo | jobTitle |

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

| 1002 | Murphy | 1 | NULL | President |

| 1056 | Patterson | 1 | 1002 | VP Sales |

| 1088 | William | 6 | 1056 | Sales Manager(APAC) |

| 1102 | Gerard | 4 | 1056 | Sales Manager(EMEA) |

| 1166 | Leslie | 1 | 1143 | Sales Rep |

| 1188 | Julie | 2 | 1143 | Sales Rep |

| 1216 | Steve | 2 | 1143 | Sales Rep |

| 1286 | Foon Yue | 2 | 1143 | Sales Rep |

| 1323 | George | 2 | 1143 | Sales Rep |

| 1370 | Gerard | 2 | 1102 | Sales Rep |

| 1401 | Pamela | 2 | 1102 | Sales Rep |

| 1504 | Larry | 2 | 1102 | Sales Rep |

| 1612 | Peter | 2 | 1088 | Sales Rep |

| 1702 | Martin | 4 | 1102 | Sales Rep |

| 1420 | Maria | 1 | NULL | Salesrep |

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

15 rows in set (0.00 sec)

**Q 9. Create view p\_code to select product code with average price by grouping product code .**

mysql> CREATE VIEW p\_code AS SELECT productCode,AVG(buyPrice) FROM ProductDetails GROUP BY productCode;

Query OK, 0 rows affected (0.43 sec)

mysql> SELECT \* FROM p\_code;

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

| productCode | AVG(buyPrice) |

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

| S10 | 48.810001373291016 |

| S11 | 98.58000183105469 |

| S12 | 68.98999786376953 |

| S13 | 91.0199966430664 |

| S14 | 85.68000030517578 |

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

5 rows in set (0.11 sec)

**Q 10. Create view view4 from customer table for customer belong to usa with attributes customer names customer number.**

mysql> CREATE VIEW view4 AS SELECT customerName, customerNumber FROM customer WHERE country = 'USA';

Query OK, 0 rows affected (0.14 sec)

mysql> SELECT \* FROM view4;

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

| customerName | customerNumber |

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

| Land of Toys Inc. | 131 |

| Vitachrome Inc. | 181 |

| Online Diecast Co. | 363 |

| Mint Distributors Inc. | 486 |

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

4 rows in set (0.00 sec)

**Q 11. Create view view5 office detail of employee who have works as sales representative.**

mysql> CREATE VIEW view5 AS

-> SELECT DISTINCT e.jobTitle, o.officeCode, o.City, o.Country, o.postalCode FROM OfficeDetails AS o, employee AS e

-> WHERE o.officeCode = e.officeCode AND e.jobTitle = 'Sales Rep';

Query OK, 0 rows affected (0.16 sec)

mysql> SELECT \* FROM view5;

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

| jobTitle | officeCode | City | Country | postalCode |

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

| Sales Rep | 1 | San Francisco | USA | 94080 |

| Sales Rep | 2 | Boston | USA | 2107 |

| Sales Rep | 4 | Paris | France | 75017 |

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

3 rows in set (0.00 sec)

**Q 12. Create view view6 Count the Number of office in each country in descending order.**

mysql> CREATE VIEW vview6 AS SELECT COUNT(\*) AS No\_of\_Ofc, Country

-> FROM OfficeDetails GROUP BY Country ORDER BY COUNT(\*) DESC;

Query OK, 0 rows affected (0.13 sec)

mysql> SELECT \* FROM vview6;

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

| No\_of\_Ofc | Country |

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

| 3 | USA |

| 1 | France |

| 1 | Japan |

| 1 | Australia |

| 1 | UK |

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

5 rows in set (0.00 sec)

**Q 13. Insert a row (369,’billagates’) in view vview4.**

mysql> INSERT INTO view4 VALUES ('Billgates',369);

mysql> SELECT \* FROM view4;

| customerName | customerNumber |

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

| Land of Toys Inc. | 131 |

| Vitachrome Inc. | 181 |

| Online Diecast Co. | 363 |

| Mint Distributors Inc. | 486 |

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

mysql> SELECT \* FROM customer;

| customerNumber | customerName | phone | city | country | salesRep |

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

| 121 | Baane Mini Imports | 07-98 9555 | Stavern | Norway | 1504 |

| 131 | Land of Toys Inc. | 2125557818 | NYC | USA | 1323 |

| 141 | Euto+ Shopping Channel | (91) 555 94 44 | Madrid | Spain | 1370 |

| 145 | Danish Wholesale Imports | 31 12 3555 | Kobenhavn | Denmark | 1401 |

| 181 | Vitachrome Inc. | 2125551500 | NYC | USA | 1286 |

| 278 | Rovelli gifts | 035-640555 | Bergamo | Italy | 1401 |

| 363 | Online Diecast Co. | 6035558647 | Nashua | USA | 1216 |

| 385 | Cruz & Sons Co. | +63 2 555 3587 | Makati City | Philippines | 1612 |

| 486 | Mint Distributors Inc. | 2155559857 | Philadelphia | USA | 1323 |

| 369 | Billgates | NULL | NULL | NULL | NULL |

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

**Q 14. Remove customer number attributes from view4 table.**

mysql> ALTER VIEW view4 AS SELECT customerName FROM customer WHERE country='USA';

mysql> SELECT \* FROM view4;

| customerName |

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

| Land of Toys Inc. |

| Vitachrome Inc. |

| Online Diecast Co. |

| Mint Distributors Inc. |

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

**Q 15. Create view with the name of employee from Employee table who serves as sales representative in country=”USA”.**

mysql> CREATE VIEW v\_employee AS

-> SELECT DISTINCT e.firstName FROM employee AS e, customer AS c

-> WHERE e.employeeNumber = c.salesRep AND e.jobTitle = 'Sales Rep' AND c.country = 'USA';

mysql> SELECT \* FROM v\_employee;

| firstName |

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

| Steve |

| Foon Yue |

| George |

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

**Q 16. Create view vview7 for detail of customer who have make order in the month of March.**

mysql> CREATE VIEW vview7 AS SELECT c.customerNumber, c.customerName, c.phone, c.city, c.country, c.salesRep

-> FROM customer AS c, OrderTable AS o

-> WHERE c.customerNumber = o.customerNumber AND o.orderDate >= '2003-03-01' AND o.orderDate <= '2003-03-31';

mysql> SELECT \* FROM vview7;

| customerNumber | customerName | phone | city | country | salesRep |

| 385 | Cruz & Sons Co. | +63 2 555 3587 | Makati City | Philippines | 1612 |

| 486 | Mint Distributors Inc. | 2155559857 | Philadelphia | USA | 1323 |

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

**Q 17. Cretate view vview8 with the emplyoee name from employee table whose officecode=1 and jobtitle=”VP sale”.**

mysql> CREATE VIEW vview8 AS SELECT firstName FROM employee WHERE officeCode = 1 AND jobTitle = 'VP Sales';

mysql> SELECT \* FROM vview8;

| firstName |

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

| Patterson |

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

**Q 18. Create a synonyms for the database containing the tables and views used till now.**

mysql> SHOW DATABASES;

| Database |

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

| information\_schema |

| mysql |

| nitishbhattacharjee |

| performance\_schema |

mysql> CALL sys.create\_synonym\_db('NitishBhattacharjee', 'NB');

| summary |

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

| Created 15 views in the `NB` database |

mysql> SHOW FULL TABLES FROM NB;

| Tables\_in\_nb | Table\_type |

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

| customer | VIEW |

| employee | VIEW |

| officedetails | VIEW |

| orderdetails | VIEW |

| ordertable | VIEW |

| productdetails | VIEW |

| v\_employee | VIEW |

| view4 | VIEW |

| view5 | VIEW |

| vview2 | VIEW |

| vview3 | VIEW |

| vview6 | VIEW |

| vview7 | VIEW |

| vview8 | VIEW |

mysql> DROP DATABASE NB;

mysql> SHOW FULL TABLES FROM NB;

ERROR 1049 (42000): Unknown database 'nb'

**Q 19. Create a sequence on employee the table.**

mysql> ALTER TABLE employee MODIFY COLUMN employeeNumber INT auto\_increment PRIMARY KEY;

Query OK, 15 rows affected (2.96 sec)

Records: 15 Duplicates: 0 Warnings: 0

mysql> INSERT INTO employee(firstName,officeCode,reportsTo,jobTitle) VALUES('Nitish',4,1056,'Sales Rep');

Query OK, 1 row affected (0.14 sec)

mysql> INSERT INTO employee(firstName,officeCode,reportsTo,jobTitle) VALUES('Nitish',4,1056,'Sales Rep');

Query OK, 1 row affected (0.17 sec)

mysql> SELECT \* FROM employee;

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

| employeeNumber | firstName | officeCode | reportsTo | jobTitle |

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

| 1002 | Murphy | 1 | NULL | President |

| 1056 | Patterson | 1 | 1002 | VP Sales |

| 1088 | William | 6 | 1056 | Sales Manager(APAC) |

| 1102 | Gerard | 4 | 1056 | Sales Manager(EMEA) |

| 1166 | Leslie | 1 | 1143 | Sales Rep |

| 1188 | Julie | 2 | 1143 | Sales Rep |

| 1216 | Steve | 2 | 1143 | Sales Rep |

| 1286 | Foon Yue | 2 | 1143 | Sales Rep |

| 1323 | George | 2 | 1143 | Sales Rep |

| 1370 | Gerard | 2 | 1102 | Sales Rep |

| 1401 | Pamela | 2 | 1102 | Sales Rep |

| 1420 | Maria | 1 | NULL | Salesrep |

| 1504 | Larry | 2 | 1102 | Sales Rep |

| 1612 | Peter | 2 | 1088 | Sales Rep |

| 1702 | Martin | 4 | 1102 | Sales Rep |

| 1703 | Nitish | 4 | 1056 | Sales Rep |

| 1704 | Nitish | 4 | 1056 | Sales Rep |

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

17 rows in set (0.00 sec)