1.)

CREATE TABLE ORDERS(ORDERNO INT ,CUSTOMERID INT PRIMARY KEY, ORDERDATE DATE);

Query OK, 0 rows affected (0.47 sec)

INSERT INTO ORDERS VALUES(10308,2,'1996-09-18');

Query OK, 1 row affected (0.17 sec)

mysql> INSERT INTO ORDERS VALUES(10309,37,'1996-09-19');

Query OK, 1 row affected (0.12 sec)

mysql> INSERT INTO ORDERS VALUES(10310,77,'1996-09-20');

Query OK, 1 row affected (0.15 sec)

mysql> CREATE TABLE CUSTOMER ( CUSTOMERID INT, CUSTOMERNAME VARCHAR(30),CONTACTNAME VARCHAR(30),COUNTRY VARCHAR(20));

Query OK, 0 rows affected (0.43 sec)

mysql> INSERT INTO CUSTOMER VALUES(1,'ALFREDS FUTTERKISTE','MARIA ANDERS','GERMANY');

Query OK, 1 row affected (0.13 sec)

mysql> INSERT INTO CUSTOMER VALUES(2,'ANA TRUJILO EMPAREDADOS','ANA TRUJILO','MEXICO');

Query OK, 1 row affected (0.19 sec)

mysql> INSERT INTO CUSTOMER VALUES(3,'ANTONIO MORENO TAQUERIA','ANA ANTONIO MORENO','MEXICO');

Query OK, 1 row affected (0.11 sec)

mysql> INSERT INTO ORDERS VALUES(10311,4,'1996-07-20');

Query OK, 1 row affected (0.12 sec)

mysql> INSERT INTO ORDERS VALUES(10312,7,'1996-06-20');

Query OK, 1 row affected (0.13 sec)

mysql> INSERT INTO ORDERS VALUES(10313,8,'1994-06-20');

Query OK, 1 row affected (0.13 sec)

mysql> INSERT INTO ORDERS VALUES(10315,6767,'1998-06-30');

Query OK, 1 row affected (0.07 sec)

mysql> INSERT INTO ORDERS VALUES(10315,65,'1998-10-23');

Query OK, 1 row affected (0.14 sec)

mysql> INSERT INTO CUSTOMER VALUES (4, 'DANIEL SUJAY', 'Sairam', 'India'), (5, 'Arjun Reddy', 'Preeti Shetty', 'India'), (6, 'HarshitH VIGNESH', 'Renuka Singh', 'India'), (7, 'NITIN MORE', 'Anushka Sharma', 'USA'), (8, 'AUSTHOSH Singh', 'Rajiv Malhotra', 'USA');

mysql> SELECT \* FROM CUSTOMER;

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

| CUSTOMERID | CUSTOMERNAME | CONTACTNAME | COUNTRY |

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

| 1 | ALFREDS FUTTERKISTE | MARIA ANDERS | GERMANY |

| 2 | ANA TRUJILO EMPAREDADOS | ANA TRUJILO | MEXICO |

| 3 | ANTONIO MORENO TAQUERIA | ANA ANTONIO MORENO | MEXICO |

| 4 | DANIEL SUJAY | Sairam | India |

| 5 | Arjun Reddy | Preeti Shetty | India |

| 6 | HarshitH VIGNESH | Renuka Singh | India |

| 7 | NITIN MORE | Anushka Sharma | USA |

| 8 | AUSTHOSH Singh | Rajiv Malhotra | USA |

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

8 rows in set (0.00 sec)

mysql> SELECT \* FROM ORDERS;

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

| ORDERNO | CUSTOMERID | ORDERDATE |

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

| 10308 | 2 | 1996-09-18 |

| 10311 | 4 | 1996-07-20 |

| 10312 | 7 | 1996-06-20 |

| 10313 | 8 | 1994-06-20 |

| 10309 | 37 | 1996-09-19 |

| 10315 | 65 | 1998-10-23 |

| 10310 | 77 | 1996-09-20 |

| 10315 | 6767 | 1998-06-30 |

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

8 rows in set (0.00 sec)

1.2)SELECT \* FROM ORDERS INNER JOIN CUSTOMER ON ORDERS.CUSTOMERID = CUSTOMER.CUSTOMERID;

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

| ORDERNO | CUSTOMERID | ORDERDATE | CUSTOMERID | CUSTOMERNAME | CONTACTNAME | COUNTRY |

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

| 10308 | 2 | 1996-09-18 | 2 | ANA TRUJILO EMPAREDADOS | ANA TRUJILO | MEXICO |

| 10311 | 4 | 1996-07-20 | 4 | DANIEL SUJAY | Sairam | India |

| 10312 | 7 | 1996-06-20 | 7 | NITIN MORE | Anushka Sharma | USA |

| 10313 | 8 | 1994-06-20 | 8 | AUSTHOSH Singh | Rajiv Malhotra | USA |

3.)SELECT \* FROM ORDERS LEFT OUTER JOIN CUSTOMER ON ORDERS.CUSTOMERID = CUSTOMER.CUSTOMERID;

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

| ORDERNO | CUSTOMERID | ORDERDATE | CUSTOMERID | CUSTOMERNAME | CONTACTNAME | COUNTRY |

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

| 10308 | 2 | 1996-09-18 | 2 | ANA TRUJILO EMPAREDADOS | ANA TRUJILO | MEXICO |

| 10311 | 4 | 1996-07-20 | 4 | DANIEL SUJAY | Sairam | India |

| 10312 | 7 | 1996-06-20 | 7 | NITIN MORE | Anushka Sharma | USA |

| 10313 | 8 | 1994-06-20 | 8 | AUSTHOSH Singh | Rajiv Malhotra | USA |

| 10309 | 37 | 1996-09-19 | NULL | NULL | NULL | NULL |

| 10315 | 65 | 1998-10-23 | NULL | NULL | NULL | NULL |

| 10310 | 77 | 1996-09-20 | NULL | NULL | NULL | NULL |

| 10315 | 6767 | 1998-06-30 | NULL | NULL | NULL | NULL

4.) SELECT \* FROM ORDERS RIGHT OUTER JOIN CUSTOMER ON ORDERS.CUSTOMERID = CUSTOMER.CUSTOMERID;

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

| ORDERNO | CUSTOMERID | ORDERDATE | CUSTOMERID | CUSTOMERNAME | CONTACTNAME | COUNTRY |

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

| NULL | NULL | NULL | 1 | ALFREDS FUTTERKISTE | MARIA ANDERS | GERMANY |

| 10308 | 2 | 1996-09-18 | 2 | ANA TRUJILO EMPAREDADOS | ANA TRUJILO | MEXICO |

| NULL | NULL | NULL | 3 | ANTONIO MORENO TAQUERIA | ANA ANTONIO MORENO | MEXICO |

| 10311 | 4 | 1996-07-20 | 4 | DANIEL SUJAY | Sairam | India |

| NULL | NULL | NULL | 5 | Arjun Reddy | Preeti Shetty | India |

| NULL | NULL | NULL | 6 | HarshitH VIGNESH | Renuka Singh | India |

| 10312 | 7 | 1996-06-20 | 7 | NITIN MORE | Anushka Sharma | USA |

| 10313 | 8 | 1994-06-20 | 8 | AUSTHOSH Singh | Rajiv Malhotra | USA

5.)SELECT \* FROM ORDERS LEFT OUTER JOIN CUSTOMER ON ORDERS.CUSTOMERID = CUSTOMER.CUSTOMERID UNION SELECT \* FROM ORDERS RIGHT OUTER JOIN CUSTOMER ON ORDERS.CUSTOMERID = CUSTOMER.CUSTOMERID;

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

| ORDERNO | CUSTOMERID | ORDERDATE | CUSTOMERID | CUSTOMERNAME | CONTACTNAME | COUNTRY |

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

| 10308 | 2 | 1996-09-18 | 2 | ANA TRUJILO EMPAREDADOS | ANA TRUJILO | MEXICO |

| 10311 | 4 | 1996-07-20 | 4 | DANIEL SUJAY | Sairam | India |

| 10312 | 7 | 1996-06-20 | 7 | NITIN MORE | Anushka Sharma | USA |

| 10313 | 8 | 1994-06-20 | 8 | AUSTHOSH Singh | Rajiv Malhotra | USA |

| 10309 | 37 | 1996-09-19 | NULL | NULL | NULL | NULL |

| 10315 | 65 | 1998-10-23 | NULL | NULL | NULL | NULL |

| 10310 | 77 | 1996-09-20 | NULL | NULL | NULL | NULL |

| 10315 | 6767 | 1998-06-30 | NULL | NULL | NULL | NULL |

| NULL | NULL | NULL | 1 | ALFREDS FUTTERKISTE | MARIA ANDERS | GERMANY |

| NULL | NULL | NULL | 3 | ANTONIO MORENO TAQUERIA | ANA ANTONIO MORENO | MEXICO |

| NULL | NULL | NULL | 5 | Arjun Reddy | Preeti Shetty | India |

| NULL | NULL | NULL | 6 | HarshitH VIGNESH | Renuka Singh | India |

2.)

1.) create table Customer(CUSTID INT,CUST\_NAME VARCHAR(30));

Query OK, 0 rows affected (0.42 sec)

mysql> CREATE TABLE ITEM(ITEMID INT,ITEM\_NAME VARCHAR(30),PRICE INT);

Query OK, 0 rows affected (0.41 sec)

mysql> CREATE TABLE SALE(BILLNO INT,BILLDATE DATE,CUSTID INT,ITEMID INT,QTY\_SOLD INT);

Query OK, 0 rows affected (0.52 sec)

mysql> INSERT INTO Customer VALUES(1,'JOHN');

Query OK, 1 row affected (0.12 sec)

mysql> INSERT INTO Customer VALUES(2,'DAVID');

Query OK, 1 row affected (0.12 sec)

mysql> INSERT INTO Customer VALUES(3,'PREETHAM K');

Query OK, 1 row affected (0.13 sec)

mysql> INSERT INTO Customer VALUES(4,'ARUN');

Query OK, 1 row affected (0.13 sec)

mysql> INSERT INTO Customer VALUES(5,'ANIRUDH');

Query OK, 1 row affected (0.14 sec)

mysql> INSERT INTO Customer VALUES(6,'VISHAL');

Query OK, 1 row affected (0.13 sec)

mysql> INSERT INTO Customer VALUES(7,'NILA');

Query OK, 1 row affected (0.16 sec)

mysql> INSERT INTO Customer VALUES(8,'MADHU');

Query OK, 1 row affected (0.05 sec)

mysql> INSERT INTO Customer VALUES(9,'HARSHITH');

Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO Customer VALUES(10,'DHSDBET');

Query OK, 1 row affected (0.13 sec)

mysql> INSERT INTO ITEM VALUES(10,'BOX',1000);

Query OK, 1 row affected (0.12 sec)

mysql> INSERT INTO ITEM VALUES(20,'PENCIL',10);

Query OK, 1 row affected (0.13 sec)

mysql> INSERT INTO ITEM VALUES(30,'ERASER',20);

Query OK, 1 row affected (0.05 sec)

mysql> INSERT INTO ITEM VALUES(40,'PEN',50);

Query OK, 1 row affected (0.13 sec)

mysql> INSERT INTO ITEM VALUES(50,'BOTTLE',250);

Query OK, 1 row affected (0.13 sec)

mysql> INSERT INTO ITEM VALUES(60,'BALL',100);

Query OK, 1 row affected (0.13 sec)

mysql> INSERT INTO ITEM VALUES(70,'BAT',500);

Query OK, 1 row affected (0.13 sec)

mysql> INSERT INTO ITEM VALUES(80,'STUMPS',300);

Query OK, 1 row affected (0.14 sec)

mysql> INSERT INTO ITEM VALUES(90,'BOARD',135);

Query OK, 1 row affected (0.13 sec)

mysql> INSERT INTO ITEM VALUES(100,'CARROM',250);

Query OK, 1 row affected (0.21 sec)

mysql> INSERT INTO SALE VALUES(24,'2020-05-06',1,20,4);

Query OK, 1 row affected (0.14 sec)

mysql> INSERT INTO SALE VALUES(28,'2020-05-06',2,50,3);

Query OK, 1 row affected (0.12 sec)

mysql> INSERT INTO SALE VALUES(34,'2020-05-06',3,60,2);

Query OK, 1 row affected (0.07 sec)

mysql> INSERT INTO SALE VALUES(48,'2020-05-06',30,10,1);

Query OK, 1 row affected (0.16 sec)

mysql> INSERT INTO SALE VALUES(50,'2020-05-06',4,60,1);

Query OK, 1 row affected (0.13 sec)

mysql> INSERT INTO SALE VALUES(67,'2020-05-06',5,30,5);

Query OK, 1 row affected (0.14 sec)

mysql> INSERT INTO SALE VALUES(74,'2020-05-06',7,80,1);

Query OK, 1 row affected (0.12 sec)

mysql> INSERT INTO SALE VALUES(98,'2020-05-06',8,40,3);

Query OK, 1 row affected (0.14 sec)

mysql> INSERT INTO SALE VALUES(96,'2020-05-06',9,100,2);

Query OK, 1 row affected (0.13 sec)

mysql> INSERT INTO SALE VALUES(105,'2020-05-06',10,70,2);

Query OK, 1 row affected (0.18 sec)

mysql> SELECT\* FROM Customer;

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

| CUSTID | CUST\_NAME |

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

| 1 | JOHN |

| 2 | DAVID |

| 3 | PREETHAM K |

| 4 | ARUN |

| 5 | ANIRUDH |

| 6 | VISHAL |

| 7 | NILA |

| 8 | MADHU |

| 9 | HARSHITH |

| 10 | DHSDBET |

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

10 rows in set (0.00 sec)

mysql> SELECT\* FROM ITEM;

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

| ITEMID | ITEM\_NAME | PRICE |

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

| 10 | BOX | 1000 |

| 20 | PENCIL | 10 |

| 30 | ERASER | 20 |

| 40 | PEN | 50 |

| 50 | BOTTLE | 250 |

| 60 | BALL | 100 |

| 70 | BAT | 500 |

| 80 | STUMPS | 300 |

| 90 | BOARD | 135 |

| 100 | CARROM | 250 |

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

10 rows in set (0.00 sec)

mysql> SELECT\* FROM SALE;

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

| BILLNO | BILLDATE | CUSTID | ITEMID | QTY\_SOLD |

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

| 24 | 2020-05-06 | 1 | 20 | 4 |

| 28 | 2020-05-06 | 2 | 50 | 3 |

| 34 | 2020-05-06 | 3 | 60 | 2 |

| 48 | 2020-05-06 | 30 | 10 | 1 |

| 50 | 2020-05-06 | 4 | 60 | 1 |

| 67 | 2020-05-06 | 5 | 30 | 5 |

| 74 | 2020-05-06 | 7 | 80 | 1 |

| 98 | 2020-05-06 | 8 | 40 | 3 |

| 96 | 2020-05-06 | 9 | 100 | 2 |

| 105 | 2020-05-06 | 10 | 70 | 2 |

2.)

CREATE VIEW LUXURY\_ITEMS AS SELECT ITEMID,PRICE FROM ITEM WHERE PRICE>500;

Query OK, 0 rows affected (0.13 sec)

mysql> SELECT \* FROM LUXURY\_ITEMS;

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

| ITEMID | PRICE |

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

| 10 | 1000 |

3.) UPDATE LUXURY\_ITEMS SET PRICE=250 WHERE ITEMID=2;

Query OK, 0 rows affected (0.00 sec)

4.)CREATE OR REPLACE VIEW LUXURY\_ITEMS AS SELECT ITEMID, PRICE FROM ITEM WHERE PRICE<500;

Query OK, 0 rows affected (0.14 sec)

mysql> SELECT \* FROM LUXURY\_ITEMS;

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

| ITEMID | PRICE |

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

| 20 | 10 |

| 30 | 20 |

| 40 | 50 |

| 50 | 250 |

| 60 | 100 |

| 80 | 300 |

| 90 | 135 |

| 100 | 250 |

5.)CREATE VIEW LUXURY\_ITEMS1 AS SELECT ITEMID, PRICE FROM ITEM WHERE PRICE>500 WITH CHECK OPTION;

Query OK, 0 rows affected (0.13 sec)

INSERT INTO LUXURY\_ITEMS1 VALUES(22, 250);

CHECK OPTION failed 'lab5.LUXURY\_ITEMS1'

6.) CREATE VIEW TODAYSSALES AS SELECT BILLNO,m.ITEMID,ITEM\_NAME,PRICE,CUST\_NAME FROM SALE s INNER JOIN ITEM m on s.ITEMID=m.ITEMID INNER JOIN Customer C ON C.CUSTID=s.CUSTID;

Query OK, 0 rows affected (0.12 sec)

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

| BILLNO | ITEMID | ITEM\_NAME | PRICE | CUST\_NAME |

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

| 24 | 20 | PENCIL | 10 | JOHN |

| 28 | 50 | BOTTLE | 250 | DAVID |

| 34 | 60 | BALL | 100 | PREETHAM K |

| 50 | 60 | BALL | 100 | ARUN |

| 67 | 30 | ERASER | 20 | ANIRUDH |

| 74 | 80 | STUMPS | 300 | NILA |

| 98 | 40 | PEN | 50 | MADHU |

| 96 | 100 | CARROM | 250 | HARSHITH |

| 105 | 70 | BAT | 500 | DHSDBET |

7.) UPDATE TODAYSSALES SET PRICE = 150 WHERE ITEMID=20;

Query OK, 1 row affected (0.06 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> SELECT \* FROM TODAYSSALES;

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

| BILLNO | ITEMID | ITEM\_NAME | PRICE | CUST\_NAME |

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

| 24 | 20 | PENCIL | 150 | JOHN |

| 28 | 50 | BOTTLE | 250 | DAVID |

| 34 | 60 | BALL | 100 | PREETHAM K |

| 50 | 60 | BALL | 100 | ARUN |

| 67 | 30 | ERASER | 20 | ANIRUDH |

| 74 | 80 | STUMPS | 300 | NILA |

| 98 | 40 | PEN | 50 | MADHU |

| 96 | 100 | CARROM | 250 | HARSHITH |

| 105 | 70 | BAT | 500 | DHSDBET |

8.)

CREATE VIEW NOOFPRODUCTS AS SELECT C.CUST\_NAME,S.QTY\_SOLD FROM Customer C ,SALE S WHERE C.CUSTID= S.CUSTID;SELECT \* FROM NOOFPRODUCTS;

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

| CUST\_NAME | QTY\_SOLD |

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

| JOHN | 4 |

| DAVID | 3 |

| PREETHAM K | 2 |

| ARUN | 1 |

| ANIRUDH | 5 |

| NILA | 1 |

| MADHU | 3 |

| HARSHITH | 2 |

| DHSDBET | 2 |

9.)create view jques as select s.BILLNO , s.BILLDATE , s.CUSTID , i.ITEMID , i.PRICE , s.QTY\_SOLD , i.PRICE \* s.QTY\_SOLD as amount from SALE s , ITEM i where i.ITEMID = s.ITEMID;

Query OK, 0 rows affected (0.14 sec)

mysql> SELECT\* FROM jques;

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

| BILLNO | BILLDATE | CUSTID | ITEMID | PRICE | QTY\_SOLD | amount |

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

| 48 | 2020-05-06 | 30 | 10 | 1000 | 1 | 1000 |

| 24 | 2020-05-06 | 1 | 20 | 150 | 4 | 600 |

| 67 | 2020-05-06 | 5 | 30 | 20 | 5 | 100 |

| 98 | 2020-05-06 | 8 | 40 | 50 | 3 | 150 |

| 28 | 2020-05-06 | 2 | 50 | 250 | 3 | 750 |

| 34 | 2020-05-06 | 3 | 60 | 100 | 2 | 200 |

| 50 | 2020-05-06 | 4 | 60 | 100 | 1 | 100 |

| 105 | 2020-05-06 | 10 | 70 | 500 | 2 | 1000 |

| 74 | 2020-05-06 | 7 | 80 | 300 | 1 | 300 |

| 96 | 2020-05-06 | 9 | 100 | 250 | 2 | 500 |

10.)select i.ITEMID , i.ITEMNAME , i.PRICE , i.PRICE\*SUM(s.QTY\_SOLD) as amount from ITEM i , SALE s where i.ITEMID = s.ITEMID group by i.ITEMID order by amount desc limit 5;

11.)select categ , count() from ( select CUSTID , sum(amount) as expend , if(SUM(amount) < 500 , "silver") , if(SUM (amount) < 1000 , "gold" , "platinum") as categ from jques where year(BILLDATE) = 2020 GROUP BY CUSTID) as dr group by categ order by count();