1.1.) CREATE TABLE EMP(EMPNO INT PRIMARY KEY, ENAME VARCHAR(20),ELNAME VARCHAR(20), JOB VARCHAR(10), DEPTNO INT NOT NULL,ECITY VARCHAR(20), SAL DECIMAL(7,2),MANAGERNAME VARCHAR(20),MANAGERNO INT);

INSERT INTO EMP VALUES(110,'PREETHAM','KRISHNA','MICROSOFT',1,'CHENNAI', 50000.00,'JOHN',11);

INSERT INTO EMP VALUES(111,'ARUN','ARUM','MORGAN',1,'BANGLORE', 50000.00,NULL,NULL);

INSERT INTO EMP VALUES(112,'RAM','SREEVATH','MORGAN',1,'BANGLORE', 50000.00,'YOGESH',22);

INSERT INTO EMP VALUES(113,'NAVEENA','P','MORGAN',1,'HYDERABAD', 3000.00,'YOGESH',22);

INSERT INTO EMP VALUES(114,'APURVA','P','PAYPAL',2,'HYDERABAD', 30000.00,NULL,NULL);

INSERT INTO EMP VALUES(115,'HARSHITH','VIGNESH','NVIDIA',2,'HYDERABAD', 30000.00,'JOHN',11);

INSERT INTO EMP VALUES(116,'SHARAN','CHANDRA','ORACLE',2,'HYDERABAD', 40000.00,'YOGESH',22);

INSERT INTO EMP VALUES(117,'VISHAL','SARA','ORACLE',1,'HYDERABAD', 45000.00,'JOHN',11);

INSERT INTO EMP VALUES(118,'LISA','R','ADOBE',1,'DELHI', 45000.00,NULL,NULL);

INSERT INTO EMP VALUES(119,'KUMS','R','FIDELITY',1,'PUNE', 45000.00,'ISSAC',33);

SELECT\*FROM EMP;

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

| EMPNO | ENAME | ELNAME | JOB | DEPTNO | ECITY | SAL | MANAGERNAME | MANAGERNO |

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

| 110 | PREETHAM | KRISHNA | MICROSOFT | 1 | CHENNAI | 50000.00 | JOHN | 11 |

| 111 | ARUN | ARUM | MORGAN | 1 | BANGLORE | 50000.00 | NULL | NULL |

| 112 | RAM | SREEVATH | MORGAN | 1 | BANGLORE | 50000.00 | YOGESH | 22 |

| 113 | NAVEENA | P | MORGAN | 1 | HYDERABAD | 3000.00 | YOGESH | 22 |

| 114 | APURVA | P | PAYPAL | 2 | HYDERABAD | 30000.00 | NULL | NULL |

| 115 | HARSHITH | VIGNESH | NVIDIA | 2 | HYDERABAD | 30000.00 | JOHN | 11 |

| 116 | SHARAN | CHANDRA | ORACLE | 2 | HYDERABAD | 40000.00 | YOGESH | 22 |

| 117 | VISHAL | SARA | ORACLE | 1 | HYDERABAD | 45000.00 | JOHN | 11 |

| 118 | LISA | R | ADOBE | 1 | DELHI | 45000.00 | NULL | NULL |

| 119 | KUMS | R | FIDELITY | 1 | PUNE | 45000.00 | ISSAC | 33 |

2.)SELECT \* FROM EMP

ORDER BY

(CASE

WHEN JOB IS NULL THEN DEPTNO

ELSE JOB

END);

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

| EMPNO | ENAME | ELNAME | JOB | DEPTNO | ECITY | SAL | MANAGERNAME | MANAGERNO |

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

| 118 | LISA | R | ADOBE | 1 | DELHI | 45000.00 | NULL | NULL |

| 119 | KUMS | R | FIDELITY | 1 | PUNE | 45000.00 | ISSAC | 33 |

| 110 | PREETHAM | KRISHNA | MICROSOFT | 1 | CHENNAI | 50000.00 | JOHN | 11 |

| 111 | ARUN | ARUM | MORGAN | 1 | BANGLORE | 50000.00 | NULL | NULL |

| 112 | RAM | SREEVATH | MORGAN | 1 | BANGLORE | 50000.00 | YOGESH | 22 |

| 113 | NAVEENA | P | MORGAN | 1 | HYDERABAD | 3000.00 | YOGESH | 22 |

| 115 | HARSHITH | VIGNESH | NVIDIA | 2 | HYDERABAD | 30000.00 | JOHN | 11 |

| 116 | SHARAN | CHANDRA | ORACLE | 2 | HYDERABAD | 40000.00 | YOGESH | 22 |

| 117 | VISHAL | SARA | ORACLE | 1 | HYDERABAD | 45000.00 | JOHN | 11 |

| 114 | APURVA | P | PAYPAL | 2 | HYDERABAD | 30000.00 | NULL | NUL

3.)SELECT COUNT(\*) FROM EMP;

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

| COUNT(\*) |

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

| 10 |

4.)SELECT COUNT(DISTINCT JOB) FROM EMP;

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

| COUNT(DISTINCT JOB) |

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

| 7 |

5.)SELECT SUM(SAL),AVG(SAL) FROM EMP;

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

| SUM(SAL) | AVG(SAL) |

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

| 388000.00 | 38800.000000 |

6.)SELECT MAX(SAL) AS MAX\_SALARY ,MIN(SAL) AS MIN\_SALARY FROM EMP;

7.)SELECT MAX(SAL) - MIN(SAL) FROM EMP;

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

| MAX(SAL) - MIN(SAL) |

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

| 47000.00 |

8.)SELECT SUM(SAL), MIN(SAL), MAX(SAL),AVG(SAL) FROM EMP WHERE DEPTNO =1;

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

| SUM(SAL) | MIN(SAL) | MAX(SAL) | AVG(SAL) |

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

| 288000.00 | 3000.00 | 50000.00 | 41142.857143 |

9.)SELECT COUNT(DISTINCT SAL) FROM EMP;

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

| COUNT(DISTINCT SAL) |

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

| 5 |

10.)select ENAME,ELNAME FROM EMP WHERE MANAGERNAME IS NULL;

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

| ENAME | ELNAME |

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

| ARUN | ARUM |

| APURVA | P |

| LISA | R |

11.)

CONSIDER SAL > 40000.00.

SELECT DEPTNO , COUNT(\*) FROM EMP WHERE SAL > 40000.00 GROUP BY DEPTNO HAVING COUNT(\*) >5;

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

| DEPTNO | COUNT(\*) |

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

| 1 | 6 |

12.)select \* from EMP where EMPNO NOT IN ( select MANAGERNO from EMP where MANAGERNO is not NULL);

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

| EMPNO | ENAME | ELNAME | JOB | DEPTNO | ECITY | SAL | MANAGERNAME | MANAGERNO |

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

| 110 | PREETHAM | KRISHNA | MICROSOFT | 1 | CHENNAI | 50000.00 | JOHN | 11 |

| 111 | ARUN | ARUM | MORGAN | 1 | BANGLORE | 50000.00 | NULL | NULL |

| 112 | RAM | SREEVATH | MORGAN | 1 | BANGLORE | 50000.00 | YOGESH | 22 |

| 113 | NAVEENA | P | MORGAN | 1 | HYDERABAD | 3000.00 | YOGESH | 22 |

| 114 | APURVA | P | PAYPAL | 2 | HYDERABAD | 30000.00 | NULL | NULL |

| 115 | HARSHITH | VIGNESH | NVIDIA | 2 | HYDERABAD | 30000.00 | JOHN | 11 |

| 116 | SHARAN | CHANDRA | ORACLE | 2 | HYDERABAD | 40000.00 | YOGESH | 22 |

| 117 | VISHAL | SARA | ORACLE | 1 | HYDERABAD | 45000.00 | JOHN | 11 |

| 118 | LISA | R | ADOBE | 1 | DELHI | 45000.00 | NULL | NULL |

| 119 | KUMS | R | FIDELITY | 1 | PUNE | 45000.00 | ISSAC | 33 |

13.)select \* from EMP where EMPNO in (select managerno from EMP);

Empty set .

14.)select EMPNO , ENAME ,ELNAME ,DEPTNO from EMP where EMPNO in ( select MANAGERNO from EMP group by MANAGERNO having count(MANAGERNO) > 1);

Empty set .

2.) 1.)CREATE TABLE borrower(

-> customer\_name VARCHAR(20) PRIMARY KEY,

-> bankno INT,

-> loan\_number INT,

-> amount INT

-> );

Query OK, 0 rows affected (0.37 sec)

mysql> INSERT INTO borrower

-> VALUES

-> ("John",1,1,100000),

-> ("Robin",2,2,120000),

-> ("Smith",1,3,90000),

-> ("Mysty",2,4,150000),

-> ("Siri",3,5,70000);

Query OK, 5 rows affected (0.05 sec)

Records: 5 Duplicates: 0 Warnings: 0

mysql> CREATE TABLE depositor(

-> customer\_name VARCHAR(20) PRIMARY KEY,

-> bankno INT,

-> account\_number INT,

-> amount INT

-> );

Query OK, 0 rows affected (0.44 sec)

mysql> NSERT INTO depositor

-> VALUES

-> ("Siri",1,1,200000),

-> ("Robin",3,2,150000),

-> ("Catherine",2,3,110000),

-> ("Cami",3,4,300000),

-> ("Matthew",1,5,90000);

mysql> INSERT INTO depositor VALUES ("Siri",1,1,200000), ("Robin",3,2,150000), ("Catherine",2,3,110000), ("Cami",3,4,300000), ("Matthew",1,5,90000);

Query OK, 5 rows affected (0.12 sec)

Records: 5 Duplicates: 0 Warnings: 0

mysql> CREATE TABLE customer(

-> customer\_name VARCHAR(20) PRIMARY KEY,

-> street VARCHAR(20),

-> customer\_city VARCHAR(20)

-> );

Query OK, 0 rows affected (0.52 sec)

mysql> INSERT INTO customer

-> VALUES

-> ("John","xyz","Trichy"),

-> ("Robin","abc","Trichy"),

-> ("Siri","def","Trichy"),

-> ("Smith","Anand Nagar","Hyderabad"),

-> ("Mysty","Ameerpet","Hyderabad"),

-> ("Catherine","Banjara Hills","Hyderabad"),

-> ("Cami","South Delhi","Delhi"),

-> ("Matthew","North Delhi","Delhi"),

-> ("Betsy","mnop","Banglore");

Query OK, 9 rows affected (0.07 sec)

Records: 9 Duplicates: 0 Warnings: 0

mysql> CREATE TABLE bank(

-> bankno INT PRIMARY KEY,

-> bankname VARCHAR(20),

-> city VARCHAR(20),

-> street VARCHAR(20)

-> );

Query OK, 0 rows affected (0.40 sec)

mysql> INSERT INTO bank

-> VALUES

-> (1,"Abc","Trichy","ygkj"),

-> (2,"Def","Hyderabad","Dilshuknagar"),

-> (3,"Ghi","Delhi","Central Delhi");

Query OK, 3 rows affected (0.06 sec)

Records: 3 Duplicates: 0 Warnings: 0

SELECT\* FROM borrower;

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

| customer\_name | bankno | loan\_number | amount |

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

| John | 1 | 1 | 100000 |

| Mysty | 2 | 4 | 150000 |

| Robin | 2 | 2 | 120000 |

| Siri | 3 | 5 | 70000 |

| Smith | 1 | 3 | 90000 |

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

5 rows in set (0.01 sec)

mysql> select \* from depositer;

ERROR 1146 (42S02): Table 'john.depositer' doesn't exist

mysql> select \* from depositor;

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

| customer\_name | bankno | account\_number | amount |

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

| Cami | 3 | 4 | 300000 |

| Catherine | 2 | 3 | 110000 |

| Matthew | 1 | 5 | 90000 |

| Robin | 3 | 2 | 150000 |

| Siri | 1 | 1 | 200000 |

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

5 rows in set (0.00 sec)

mysql> select \* from customer;

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

| customer\_name | street | customer\_city |

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

| Betsy | mnop | Banglore |

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

1 row in set (0.00 sec)

mysql> select \* from bank;

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

| bankno | bankname | city | street |

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

| 1 | Abc | Trichy | ygkj |

| 2 | Def | Hyderabad | Dilshuknagar |

| 3 | Ghi | Delhi | Central Delhi |

2.)

(SELECT customer\_name FROM depositor)

-> UNION

-> (SELECT customer\_name FROM borrower);

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

| customer\_name |

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

| Cami |

| Catherine |

| Matthew |

| Robin |

| Siri |

| John |

| Mysty |

| Smith |

3)SELECT customer\_name

-> FROM depositor

-> WHERE customer\_name NOT IN

-> (SELECT customer\_name FROM borrower);

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

| customer\_name |

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

| Cami |

| Catherine |

| Matthew |

4.)SELECT borrower.customer\_name

-> FROM borrower,customer

-> WHERE customer.customer\_city = "Trichy" AND borrower.customer\_name=customer.customer\_name;

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

| customer\_name |

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

| John |

| Robin |

| Siri |

5.)SELECT borrower.customer\_name,customer.street,customer.customer\_city,bank.bankno,bank.bankname,bank.city,bank.street

-> FROM borrower,customer,bank

-> WHERE borrower.customer\_name=customer.customer\_name AND borrower.bankno=bank.bankno AND amount>100000;

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

| customer\_name | street | customer\_city | bankno | bankname | city | street |

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

| Mysty | Ameerpet | Hyderabad | 2 | Def | Hyderabad | Dilshuknagar |

| Robin | abc | Trichy | 2 | Def | Hyderabad | Dilshuknagar

6.)SELECT DISTINCT customer.customer\_name

-> FROM depositor,borrower,customer,bank

-> WHERE (depositor.customer\_name=customer.customer\_name AND

-> depositor.bankno=bank.bankno AND

-> customer.customer\_city=bank.city) OR

-> (borrower.customer\_name=customer.customer\_name AND

-> borrower.bankno=bank.bankno AND

-> customer.customer\_city=bank.city);

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

| customer\_name |

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

| Cami |

| John |

| Catherine |

| Siri |

| Mysty |

7.)SELECT bank.bankname,bank.city

-> FROM bank,borrower

-> WHERE borrower.bankno=bank.bankno AND amount=(SELECT MAX(amount) FROM borrower);

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

| bankname | city |

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

| Def | Hyderabad |

8.)DELETE FROM customer

-> WHERE customer\_name IN (SELECT customer\_name FROM borrower);

Query OK, 5 rows affected (0.13 sec)

mysql> DELETE FROM customer

-> WHERE customer\_name IN (SELECT customer\_name FROM depositor);

Query OK, 3 rows affected (0.21 sec)