PROGRAM1.Draw the E-R diagram and convert entities and relationships to relation table for a given scenario

Solution

1.COLLEGE DATABSE

STUDENT(USN,SName,Address,Phone,Gender)

SEMSEC(SSID,Sem,Sec)

CLASS(USN,SSID)

SUBJECT(Subcode,Title,Sem,CREDITS)

IAMARKS (USN,Subcode,SSID,Test1,Test2,Test3,FinallA)

2.COMPANY DATABASE

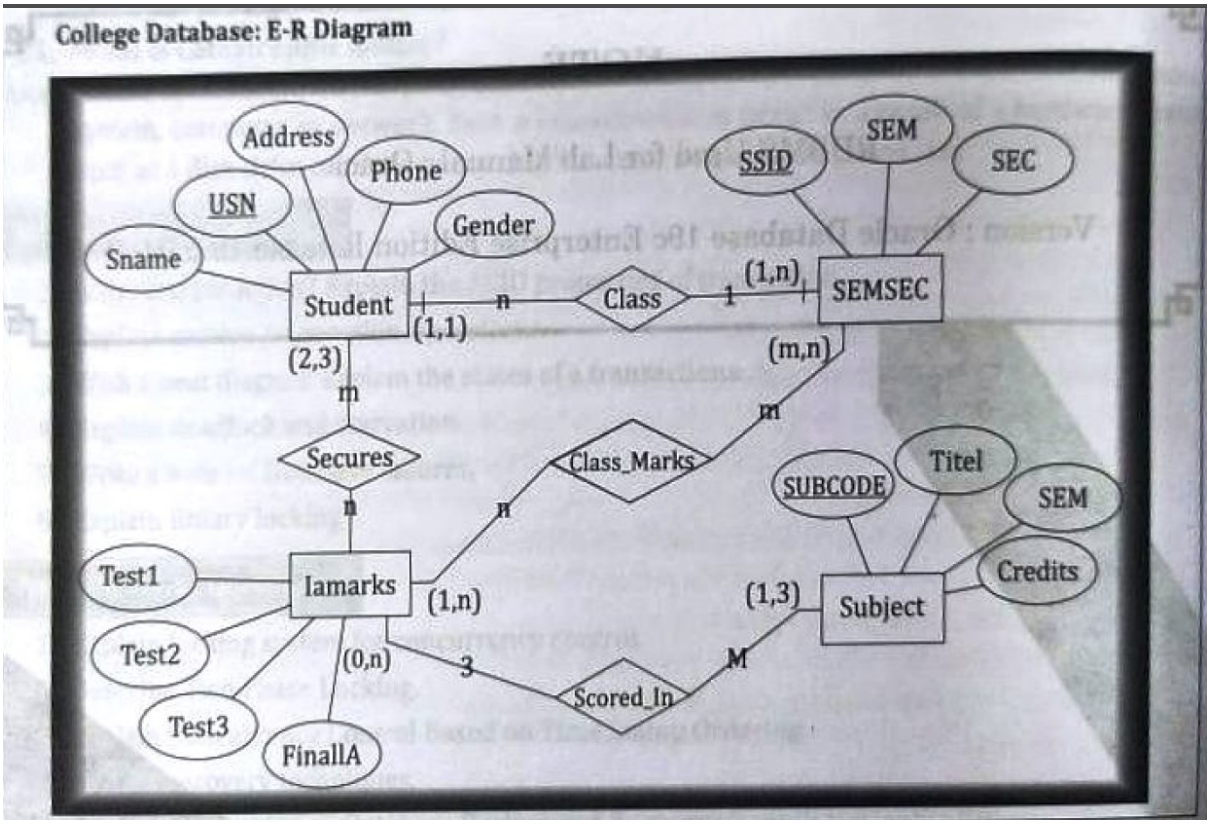
EMPLOYEE(SSN,Name,Address,Sex, Salary, SuperSSN, DNo)

DEPARTMENT(DNo,DName, MgrSSN, MgrStartDate)

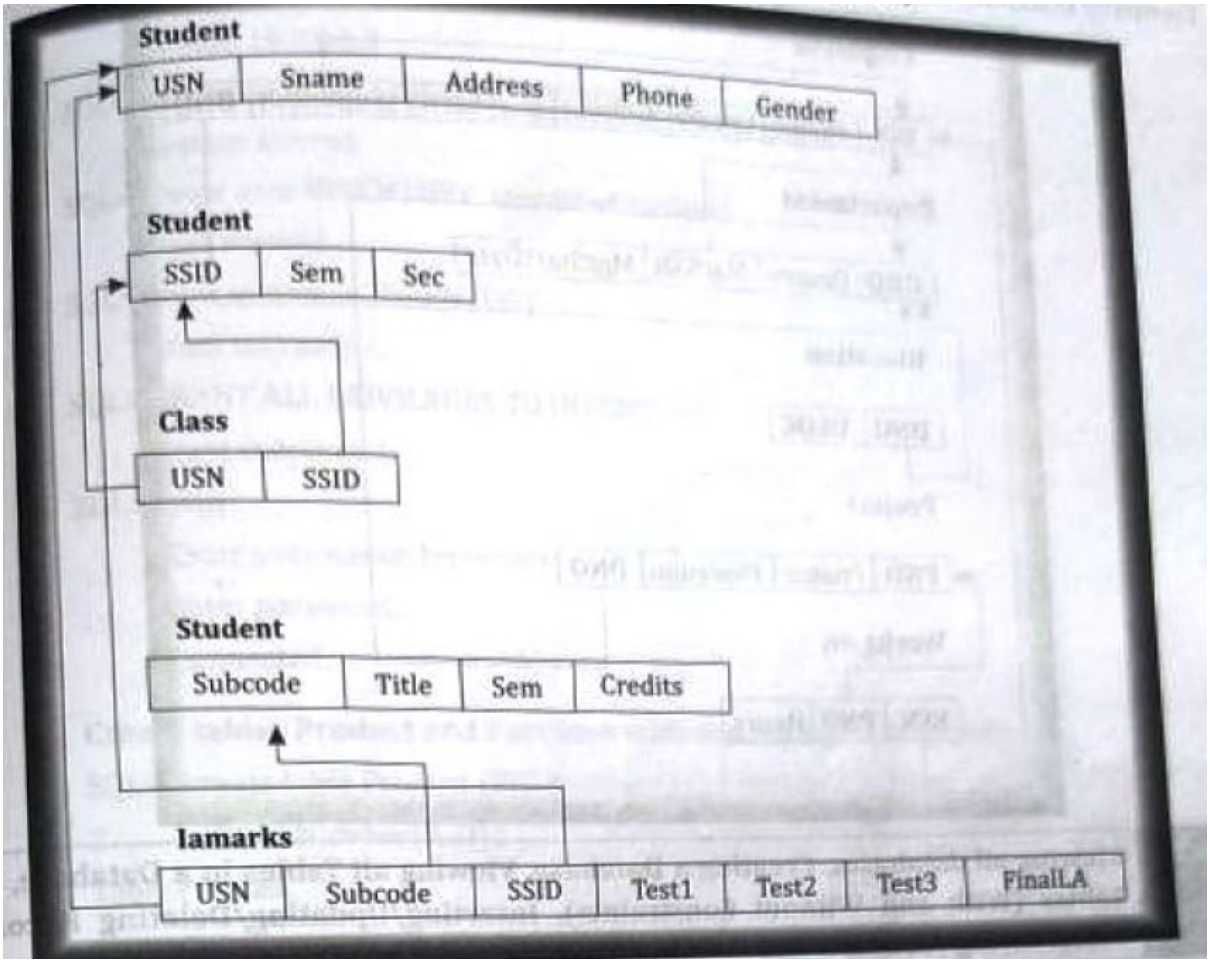
DLOCATION(DNo, DLoc)

PROJECT(PNo, PName , PLocation , DNo)

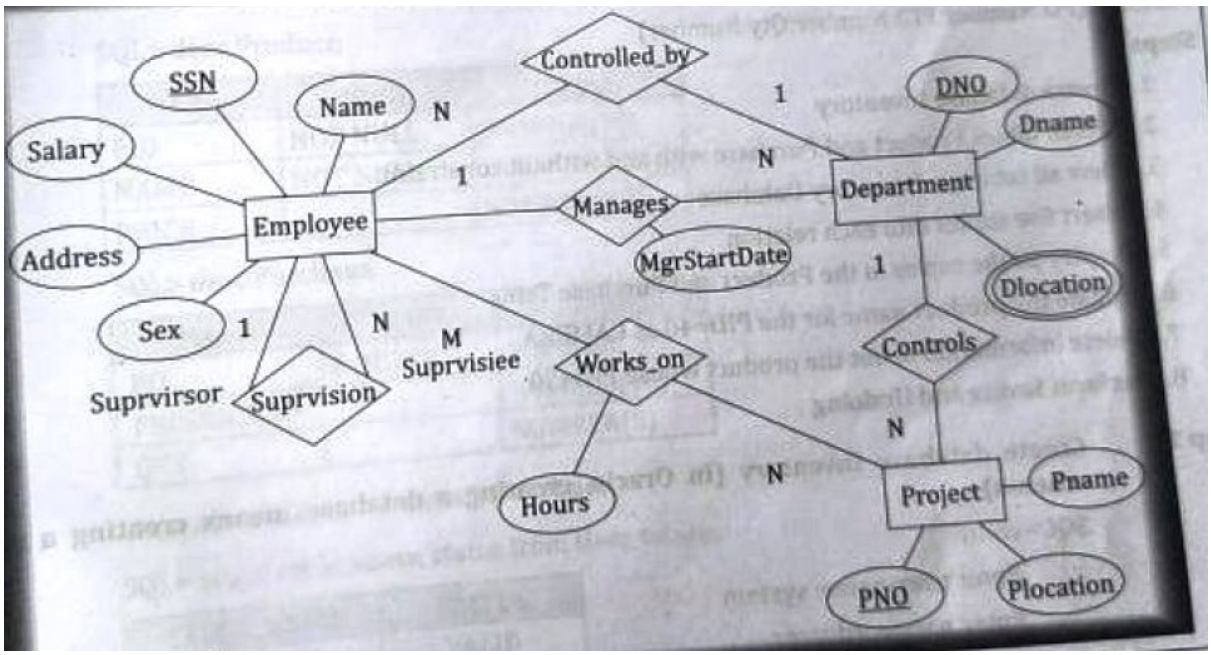
WORKS_ON(SSN,PNo, Hours)



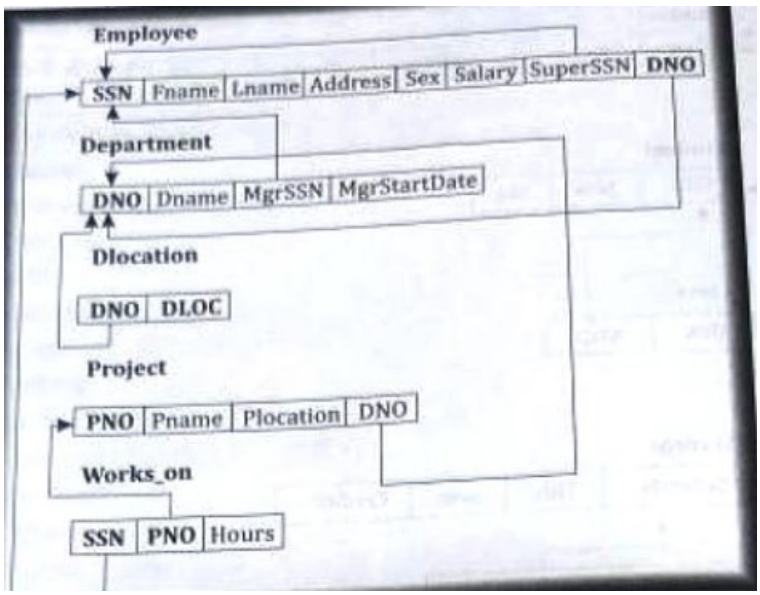
Mapping Entities and relationships to relation table (Schema Diagram)



Company DataBase : E-R Diagram



Company Database : Schema Diagram



PROGRAM 2.

Viewing all databases, creating a database, viewing all tables in a Database, creating tables (With and Without constraints), Inserting/Updating/Deleting Records in a Table, Saving (Commit) and Undoing(rollback)

Solution

Consider the Inventory Database with the following tables

Product(PID:number;Name:Text;Price:Number)

Purchase(PO:Number;PID:Number;Qty:Number)

Steps:

1.Create Database Inventory

2.Create tables Product and Purchase with and without constraint

3.View all tables in inventory database

4.Insert five tuples into each relation

5.Display all the tuples in the Product and Purchase Table

6.Update the product name for the PID = 4 as CAMERA

7.Delete information about the product whose PID = 5

8.Perform saving and Undoing

Step 1 : Create Database inventory(Creating a database means creating a user or schema)

```
CREATE DATABASE INVENTORY
```

```
Commands completed successfully.
```

2.Create tables Product and Purchase with and without constraint

```
CREATE TABLE Product(PID INT,
Name_ VARCHAR(20),Price INT
)
```

```
CREATE TABLE Purchase
(PO INT,
PID INT,QTY INT
)
```

3.View all tables in inventory database

```
SELECT table_name
FROM INFORMATION_SCHEMA.TABLES
WHERE table_type = 'BASE TABLE'
```

	table_name
1	Product
2	Purchase

```
SELECT * FROM Product
```

```
SELECT * FROM Purchase
```

4.Insert five tuples into each relation

```
INSERT INTO Product VALUES
(1,'PRINTER',20000),
(2,'KEYBOARD',10000),
(3,'MONITOR',15000),
(4,'UPS',10000),
(5,'SCANNER',14000)
```

5.Display all the tuples in the Product and Purchase Table

```
SELECT * FROM Product
```

PID	Name_	Price
1	PRINTER	20000
2	KEYBOARD	10000
3	MONITOR	15000
4	UPS	10000
5	SCANNER	14000

```
INSERT INTO Purchase VALUES
(101,5,25),
(102,1,15),
(103,3,18),
(104,2,16),
(105,4,19)
```

```
SELECT * FROM Purchase
```

PO	PID	QTY
101	5	25
102	1	15
103	3	18
104	2	16
105	4	19

6.Update the product name for the PID = 4 as CAMERA

```
UPDATE Product SET Name_ = 'CAMERA'
WHERE PID =4
```

```
(1 row affected)
```

PID	Name_	Price
1	PRINTER	20000
2	KEYBOARD	10000
3	MONITOR	15000
4	CAMERA	10000
5	SCANNER	14000

7.Delete information about the product whose PID = 5

```
DELETE FROM Product
WHERE PID = 5
```

```
(1 row affected)
```

PID	Name_	Price
1	PRINTER	20000
2	KEYBOARD	10000
3	MONITOR	15000
4	CAMERA	10000

8.Perform saving and Undoing

```
INSERT INTO Product VALUES
(5,'MOBILE',35000)

(1 row affected)


INSERT INTO Product VALUES
(6,'LAPTOP',70000)

(1 row affected)


COMMIT

Commit complete


SELECT * FROM Product

PID    Name_        Price

1      PRINTER      20000

2      KEYBOARD     10000

3      MONITOR      15000

4      CAMERA       10000

5      MOBILE       35000

6      LAPTOP       70000


SAVEPOINT S1


INSERT INTO Product VALUES
(7,'MOTHERBOARD',20000)

(1 row affected)


INSERT INTO Product VALUES
(8,'CHAIR',25000)

(1 row affected)

ROLLBACK TO S1

Rollback complete


SELECT * FROM Product
```

```
PID    Name_        Price
1      PRINTER      20000
2      KEYBOARD     10000
3      MONITOR      15000
4      CAMERA       10000
5      MOBILE       35000
6      LAPTOP       70000
```

Program 3

.Altering a Table, Dropping/Truncating / Renaming a table, backing up/ Restoring a Database

Consider the library database with the following data and execute the queries

LIB(BID,TITLE,AUTHOR,PUBLICATION,YEAR OF PUBLICATION)

STEPS

1.Create LIB table by properly specifying the constraint

2.Rename the LIB as LIBRARY

3.Add a new column price with not null contraints to the existing table library

4.All the constraints and views that reference the column are dropped automatically along with the column.

5.Rename the BID to BOOKID in the LIBRARY table.

6.Insert Data into LIBRARY table

7. Truncate table to delete the record.

8.Drop Table.

1.Create LIB table by properly specifying the constraint

```
CREATE TABLE LIB
(
```

```
BID VARCHAR(8) PRIMARY KEY,
TITLE VARCHAR(20) NOT NULL,
AUTHOR VARCHAR(20),
PUBLICATION VARCHAR (20),
YEAR_OF_PUBLICATION VARCHAR(5))
```

Table created.

DESC LIB

NAME	NULL?	TYPE
BID	NOT NULL	VARCHAR(8)
TITLE	NOT NULL	VARCHAR(20)
AUTHOR		VARCHAR(20)
PUBLICATION		VARCHAR(20)
YEAR_OF_PUBLICATION		VARCHAR(5)

2.Rename the LIB as LIBRARY

ALTER TABLE LIB RENAME TO LIBRARY

DESC LIBRARY

NAME	NULL?	TYPE
BID	NOT NULL	VARCHAR(8)
TITLE	NOT NULL	VARCHAR(20)
AUTHOR		VARCHAR(20)
PUBLICATION		VARCHAR(20)
YEAR_OF_PUBLICATION		VARCHAR(5)

3.Add a new column price with not null constraints to the existing table library

ALTER TABLE LIBRARY ADD PRICE INT NOT NULL

Table altered

DESC LIBRARY

NAME	NULL?	TYPE
BID	NOT NULL	VARCHAR(8)
TITLE	NOT NULL	VARCHAR(20)
AUTHOR		VARCHAR(20)
PUBLICATION		VARCHAR(20)
YEAR_OF_PUBLICATION		VARCHAR(5)
PRICE	NOT NULL?	INT

4.All the constraints and views that reference the column are dropped automatically along with the column.

ALTER TABLE LIBRARY DROP COLUMN AUTHOR CASCADE CONSTRAINTS

Table altered

DESC LIBRARY

NAME	NULL?	TYPE
BID	NOT NULL	VARCHAR(8)
TITLE	NOT NULL	VARCHAR(20)
PUBLICATION		VARCHAR(20)
YEAR_OF_PUBLICATION		VARCHAR(5)

5.Rename the BID to BOOKID in the LIBRARY table.

ALTER TABLE LIBRARY RENAME COLUMN BID TO BOOKID

Table altered

DESC LIBRARY

DESC LIBRARY

NAME	NULL?	TYPE
BID	NOT NULL	VARCHAR(8)
TITLE	NOT NULL	VARCHAR(20)
AUTHOR		VARCHAR(20)
PUBLICATION		VARCHAR(20)
YEAR_OF_PUBLICATION		VARCHAR(5)
PRICE	NOT NULL?	INT

6.Insert Data into LIBRARY table

INSERT INTO LIBRARY VALUES (‘SP001’,’DBMS’,’SKYWARD PUBLISHERS’,2022,300)

```
(1 row affected)
```

```
DESC LIBRARY
```

NAME	NULL?	TYPE
BOOKID	NOT NULL	VARCHAR(8)
TITLE	NOT NULL	VARCHAR(20)
PUBLICATION		VARCHAR(20)
YEAR_OF_PUBLICATION		VARCHAR(5)

PRICE	NOT NULL?	INT

7. Truncate table to delete the record.

```
TRUNCATE TABLE LIBRARY

Table LIBRARY truncated

DESC LIBRARY
```

NAME	NULL?	TYPE
BOOKID	NOT NULL	VARCHAR(8)
TITLE	NOT NULL	VARCHAR(20)
PUBLICATION		VARCHAR(20)
YEAR_OF_PUBLICATION		VARCHAR(5)
PRICE	NOT NULL?	INT

8.Drop Table.

```
DROP TABLE LIBRARY

Table dropped


DESC LIBRARY

ERROR

Object LIBRARY does not exist
```

PROGRAM 4.

For a given set of relation schemes, create tables and perform the following simple Queries, Simple Queries with aggregate functions, Queries with aggregate functions(group by and having clause)

STEPS

1.Create table Salary

2.Enter five tuples into the table

3.Display employee number and their salary

4.Find the sum of salaries of all the employees

5.Find the sum and average salaries of employees of a particular department

6.Find the number of employees working for each department.

7.Dispaly employee information in ascending and descending order of their date of joining

8.Find the highest salary that an employee draws

9.Find the leat salary that an employee draws

10.Display the details of employee whose name is Rushank and salary is greater than 50000

1.Create table Salary

CREATE TABLE SLARYDB (ENO VARCHAR(8) PRIMARY KEY, NAME VARCHAR(15) NOT NULL

,DEPT VARCHAR(10), DOJ DATE,SALARY INT)

Table created

DESC SALARY DB

Name	Null	Type
ENO	NOT NULL	VARCHAR(8)
NAME	NOT NULL	VARCHAR(15)
DEPT		VARCHAR (10)
DOJ		DATE
SALARY		INT

2.Enter five tuples into the table

INSERT INTO SALARYDB

(

('SC1010', 'AHANA' , 'HR' , '15-FEB-2010', 60000),

('SC1011', 'RAMESH', ' FINANCE', '10-MAR-2012', 45000),

('SC1013', 'NAVEEN', 'MARKETING', '8-JAN-2009', 55000),

('SC1014', 'ANAGHA', 'HR', '14-APR-2012', 35000),

('SC1015', 'RUSHANK', 'ADMIN', '16-MAY-2021', 55000),

('SC1016','RUSHANK', 'FINANCE', '4-JUN-2008', 25000)

)

SELECT * FROM SALARYDB

ENO	NAME	DEPT	DOJ	SALARY
SC1010	AHANA	HR	15-FEB-2010	60000
SC1011	RAMESH	FINANCE	10-MAR-2012	45000
SC1013	NAVEEN	MARKETING	8-JAN-2009	55000
SC1014	ANAGHA	HR	14-APR-2012	35000
SC1015	RUSHANK	ADMIN	16-MAY-2021	55000
SC1016	RUSHANK	FINANCE	4-JUN-2008	25000

6 row selected

3.Display employee number and their salary

SELECT ENO , SALARY FROM SALARYDB

ENO	SALARY
SC1010	60000
SC1011	45000
SC1013	55000
SC1014	35000
SC1015	55000
SC1016	25000

6 rows selected

4.Find the sum of salaries of all the employees

SELECT SUM(SALARY) AS "TOTAL_SALARY" FROM SALARYDB

TOTAL_SALARY
275000

5.Find the sum and average salaries of employees of a particular department

SELECT DEPT,SUM(SALARY) AS “TOTAL_SALARY”,AVG(SALARY)AS “AVERAGE_SALARY”

FROM SALARYDB GROUP BY DEPT

DEPT	TOTAL_SALARY	AVERAGE_SALARY
ADMIN	55000	55000
HR	95000	47500
FINANCE	70000	35000
MARKETING	55000	55000

6.Find the number of employees working for each department.

SELECT DEPT COUNT(*) AS “NUMBER_OF_EMPLOYEES” FROM SALARYDB GROUP BY DEPT

DEPT	NUMBER_OF_EMPLOYEES
ADMIN	1
HR	2
FINANCE	2
MARKETING	1

7.Dispaly employee information in ascending and descending order of their date of joining

SELECT * FROM SALARYDB ORDER BY DOJ ASC

ENO	NAME	DEPT	DOJ	SALARY
SC1016	RUSHANK	FINANCE	04-JUN-2008	25000
SC1013	NAVEEN	MARKETING	08-JAN-2009	55000
SC1010	AHANA	HR	15-FEB-2010	60000
SC1015	RUSHANK	ADMIN	16-MAY-2011	55000
SC1011	RAMESH	FINANCE	10-MAR-2012	45000
SC1014	ANAGHA	HR	14-APR-2012	35000

SELECT * FROM SALARYDB ORDER BY DOJ DESC

ENO	NAME	DEPT	DOJ	SALARY
SC1014	ANAGHA	HR	14-APR-2012	35000
SC1011	RAMESH	FINANCE	10-MAR-2012	45000
SC1015	RUSHANK	ADMIN	16-MAY-2011	55000
SC1010	AHANA	HR	15-FEB-2010	60000
SC1013	NAVEEN	MARKETING	08-JAN-2009	55000
SC1016	RUSHANK	FINANCE	04-JUN-2008	25000

8.Find the highest salary that an employee draws

SELECT MAX(SALARY) AS “HIGHEST_SALARY” FROM SALARYDB

HIGHEST_SALARY
60000

9.Find the least salary that an employee draws

SELECT MIN(SALARY) AS “LEAST_SALARY” FROM SALARYDB

LEAST_SALARY
25000

10.Display the details of employee whose name is Rushank and salary is greater than 50000

SELECT * FROM SALARYDB

WHERE NAME = “RUSHANK” AND SALARY >50000

ENO	NAME	DEPT	DOJ	SALARY
SC1015	RUSHANK	ADMIN	16-MAY-2011	55000

PROGRAM 5.

Execute the following queries

Create tables by properly specifying primary key and foreign keys

CREATE TABLE DEPT (DNO INT PRIMARY KEY , DNAME VARCHAR(20) NOT NULL , DLOCATION VARCHAR(20))

Table created

CREATE TABLE EMP (ENO INT PRIMARY KEY, ENAME VARCHAR(20) NOT NULL, EBDATE DATE,

ADDRESS VARCHAR(20),GENDER CHAR, SALARY INT,DEPTNO INT REFERENCES DEPT)

Table created

DESC DEPT

NAME	NULL?	TYPE
DNO	NOT NULL	INT

DNAME	NOT NULL	VARCHAR(20)
DLOCATION		VARCHAR(20)

DESC EMP

NAME	NULL	TYPE
ENO	NOT NULL	INT
ENAME	NOT NULL	VARCHAR(20)
EBDATE		DATE
ADDRESS		VARCHAR(20)
GENDER		CHAR(1)
SALARY	NOT NULL	INT
DEPTNO		INT

CREATE TABLE PROJECT (PNO INT PRIMARY KEY), PNAME VARCHAR(20) NOT NULL, DNUM INT

REFERENCES DEPT)

Table created

DESC PROJECT

NAME	NULL?	TYPE
PNO	NOT NULL	INT
PNAME	NOT NULL	VARCHAR(20)
DNUM		INT

CREATE TABLE WORKSON (ENO INT REFERENCES EMP NOT NULL , PNUM INT REFERENCES PROJECT NOT NULL , HOURS INT NOT NULL, PRIMARY KEY(ENO,PNUM))

Table created

DESC WORKSON

NAME	NULL?	TYPE
ENO	NOT NULL	INT
PNUM	NOT NULL	INT
HOURS	NOT NULL	INT

INSERT INTO DEPT(DNO,DNAME,DLOCATION) VALUES

(

(2,’ACCOUNTS’, ‘JAYANAGAR’)

)

1 row created

INSERT INTO DEPT(DNO,DNAME,DLOCATION) VALUES

(

(4,’RESEARCH’, ‘KENGERI’)

)

1 row created

INSERT INTO DEPT(DNO,DNAME,DLOCATION) VALUES

(

(5,’ADMIN’, ‘SOUTHEND’)

)

1 row created

INSERT INTO EMP(ENO,ENAME,EBDATE,ADDRESS,GENDER,SALARY,DEPTNO) VALUES

(

(1001, ‘ANIRUDH’, ‘14-01-1990’, ‘BANGALORE’ , ‘M’,4500, 4)

)

1 row created

INSERT INTO EMP(ENO,ENAME,EBDATE,ADDRESS,GENDER,SALARY,DEPTNO) VALUES

(

(1004, ‘LAKSHMI’, ‘04-03-1998’, ‘MYSORE’ , ‘F’, 5500,4)

)

1 row created

INSERT INTO EMP(ENO,ENAME,EBDATE,ADDRESS,GENDER,SALARY,DEPTNO) VALUES

(

(1002, ‘SINHASANA’, ‘22-12-1990’, ‘BANGALORE’ , ‘F’, 5000,2)

)

1 row created

INSERT INTO EMP(ENO,ENAME,EBDATE,ADDRESS,GENDER,SALARY,DEPTNO) VALUES

(

(1007, ‘PRASANTH’, 26-01-1989, ‘DARVAD’ , ‘M’,2000,4)

)

1 row created

INSERT INTO EMP(ENO,ENAME,EBDATE,ADDRESS,GENDER,SALARY,DEPTNO) VALUES

(

(1003, ‘VINAY’, ’26-11-1990’, ‘HUBLI’ , ‘M’, 3000,2)

)

1 row created

INSERT INTO EMP(ENO,ENAME,EBDATE,ADDRESS,GENDER,SALARY,DEPTNO) VALUES

(

(1005, ‘vidya’, ’26-11-1978’, ‘HUBLI’ , ‘F’, 35000,4)

)

1 row created

INSERT INTO EMP(ENO,ENAME,EBDATE,ADDRESS,GENDER,SALARY,DEPTNO) VALUES

(

(1006, ‘PRAJWAL’, ’02-02-1974, ‘BANGALORE’ , ‘M’, 65000,5)

)

1 row created

INSERT INTO EMP(ENO,ENAME,EBDATE,ADDRESS,GENDER,SALARY,DEPTNO) VALUES

(

(1008, ‘RAJESH’, ’2 -02-2010’, ‘BANGALORE’ , ‘M’, 25000,2)

)

1 row created

SELECT * FROM EMP

ENO	ENAME	EBDATE	ADDRESS	G	SALARY	DEPTNO
1001	ANIRUDH	14-01-90	BANGALORE	M	45000	4
1004	LAKSHMI	04-03-98	MYSORE	F	5500	4
1002	SINCHANA	22-12-90	MANGALORE	F	5000	2
1007	PRASANTH	26-01-89	DHARWAD	M	20000	4
1003	VINAY	26-11-90	HUBLI	M	3000	2
1005	VIDYA	26-1178	HUBLI	F	35000	4
1006	PRAJWAL	02-02-78	BANGALORE	M	65000	5
1008	RAJESH	02-02-10	BANGALORE	M	25000	2

8 row selected

SELECT * FROM DEPT

Dno	Dname	Dlocation
2	Accounts	Jayanagar
4	Research	Kengeri
5	Admin	southend

Insert into project (pno,pname,dnum)values(10,’ERP’,5),(20,’BANKING’,2),
(30,’CONNECT_TECH’,4),(40,’SMART_TECH’,5),(50,’SMART_SEEK’,5),(50,’FINANACE’,2),
(60,’ANALYTICA’,4),(70,’MARKET_RESEARCH’,4);

SELECT *FROM PROJECT;

PNO	PNAME	DNUM
10	ERP	5
20	BANKING	2
30	CONNECT_TECH	4
40	SMART_SEEK	5
50	FINANCE	2
60	ANALYTICA	4
70	MARKET_RESEARCH	4

INSERT INTO WORKS_ON(ENO,PNUM,HOURS)VALUES(1001,10,4.5),

(1002.10,6),(1008,10,4),
(1006,20,4),(1004,20,8),(1005,40,8),(1003,50,8),(1007,60,5);

SELECT *FROM WORKS_ON;

ENO	PNUM	HOURS
1001	10	4.5
1002	10	6
1008	10	4
1006	20	4
1004	20	8
1005	40	8
1003	50	8
1007	60	5

(a)How the resulting salaries , if every employee working on the ‘research ’ departments is given a 10% raise

SELECT E.ENUM,E.ENAME,D.DNAME,E.SALARY AS ‘INC_SALARY’ FROM EMP E ,DEPARTMENT D WHERE E.DEPTNO=D.DNO AND D.NAME=’RESEARCH’;

ENO	ENAME	DNAME	INC_SALARY
1001	ANIRUDH	RESEARCH	49500
1004	LAKSHMI	RESEARCH	60500
1007	PRASANTH	RESEARCH	22000
1005	VIDYA	RESEARCH	38500

(b)Find the sum of the salaries of all employees of the ‘Accounts’ department , as well as the maximum salary, the minimum salary, and the average salary in this department.

SELECT MAX(E.SALARY),MIN(E.SALARY),SUM(E.SALARY),AVG(E.SALARY)FROM EMP E,DEPT D WHERE E.DEPTNO=D.DNO AND D.DNAME=’ACCOUNTS’;

MAX(E.SALARY)	MIN(E.SALARY)	SUM(E.SALARY)	AVG(E.SALARY)
50000	25000	105000	35000

PROGRAM 6.

Execute the following queries

(a) Retrieve the name of each employee controlled by Department number 5 (use EXISTS operator)

SELECT E.ENAME FROM EMP E

WHERE EXISTS(SELECT D.DNO FROM DEPT D WHERE E.DETNO = DNO AND EPTNO=5)

ENAME
PRAJWAL

(b) Retrieve the name of each dept and number of employees working in each department which has at least 2 employees.

SELECT D.DANME.COUNT(*) FROM EMP E.DEPT D
WHERE E.DEPTNO=D.DNO GROUP BY D.NAME HAVING COUNT(*)>=2

DNAME	COUNT(*)
ACCOUNTS	3
RESEARCH	4

PROGRAM 7.

Execute the following queries

(a) For each project retrieve the project number, the project name and the number of employees who work on that project. (use GROUPBY)

SELECT P.PNO, P.PNAME COUNT(*) AS “NO_OF_EMP” FROM PROJECT P.WORKS_ON W WHERE P.PNO=W.PNUM GROUP BY P.PNO,P.PNAME

PNO	PNAME	NO_OF_EMP
10	ERP	3
60	ANALYTICA	1
20	BANKING	2
40	SMART_SEEK	1
50	FINANCE	1

(b) Retrieve the name of employees who born in the year 1990's

SELECT ENAME,EBDATE FROM EMP WHERE EBDATE LIKE '%-%-90'

ENAME	EBDATE
ANIRUDH	14-JAN-90
SINHCANA	22-DEC-90
VINAY	26-NOV-90

PROGRAM 8.

Execute the following queries

1.For each department that has more than five employees , retrieve the department number and number of employees who are making salary more than 40000.

SELECT D.DNAME,D.DNO COUNT(*) AS "NO_OF_EMP" FROM EMP E.DEPT D

WHERE E.DEPTNO = D.DNO AND E.SALARY >40000 AND

D.DNO IN(SELECT DEPTNO FROM EMP GROUP BY DEPTNO HAVING COUNT(*)>=5)

GROUP BY D.DNO , D.DNAME

No rows selected

2. For each department that has more than two employees , retrieve the department number and number of employees who are making salary more than 40000.

SELECT D.DNAME,D.DNO COUNT(*) FROM EMP E, DEPT D

WHERE E.DEPTNO = D.DNO AND E.SALARY>40000 AND

D.DNO IN(SELECT DEPTNO FROM EMP14 GROUP BY DEPTNO HAVING COUNT(*)>2

GROUP BY D.DNO,D.DNAME

DNAME	DNO	COUNT(*)
ACCOUNTS	2	1
RESEARCH	4	2

PROGRAM 9.

For each project on which more than two employees work, retrieve the project number, project name and the number of employees who work on that project.

SELECT P.PNO, P.NAME COUNT(*) AS “NO_OF_EMP_WORKING” FROM PROJECT P.EORKS ON W

WHERE P.PNO =W.PNUM GROUP BY P.PNO,P.PNAME HAVING COUNT(*)>2

PNO	PNAME	NO_OF_EMP_WORKING
10	ERP	3

PROGRAM 10.For a given set of relation tables perform the following . Creating views (with and without check option). Dropping views, Selecting from a view.

1.Without Check Option

Step 1 : Create View

CREATE VIEW EMP_DEPT AS (SELECT E.ENO,E.ENAME,E.SALARY,E.DEPTNO,D.DNAME

FROM EMP E.DEPT D WHERE E.DEPTNO = D.DNO)

Step 2: Display all the rows of a view.

SELECT * FROM EMP_DEPT

ENO	ENAME	SALARY	DEPTNO	DNAME
1001	ANIRUDH	45000	4	RESEARCH
1004	LAKSHMI	55000	4	RESEARCH
1002	SINHCANA	50000	2	ACCOUNTS
1007	PRASHANT	20000	4	RESEARCH
1003	VINAY	30000	2	ACCOUNTS
1005	VIDYA	35000	4	RESEARCH
1006	PRAJWAL	65000	5	ADMIN
1008	RAJESH	25000	2	ACCOUNTS

Step3 : Insert records into a view

INSERT INTO EMP_DEPT(ENO,EANME,SLARY,DEPTNO) VALUES (1009,”SRIKANTH”, 90000,5,”ADMIN”)

1 row sreated

Step 4: Display all the rows of a view

SELECT * FROM EMP_DEPT

ENO	ENAME	SALARY	DEPTNO	DNAME
1001	ANIRUDH	45000	4	RESEARCH

1004	LAKSHMI	55000	4	RESEARCH
1002	SINHCANA	50000	2	ACCOUNTS
1007	PRASHANT	20000	4	RESEARCH
1003	VINAY	30000	2	ACCOUNTS
1005	VIDYA	35000	4	RESEARCH
1006	PRAJWAL	65000	5	ADMIN
1008	RAJESH	25000	2	ACCOUNTS
1009	SRIKANTH	90000	5	ADMIN

Step 5: Drop view

DROP VIEW EMP_DEPT

View dropped

2.With check option

Step 1: Let us create simple view on EMP table with check option of salary less than 50000 in where condition

CREATE VIEW EMP_VIEW AS

(SELECT ENO,ENAME,SALRY FROM EMP WHERE SALARY<=50000) WITH CHECK OPTION

View EMP_VIEW created

Step 2: Display all the rows of a view

SELECT * FROM EMP_VIEW

ENO	ENAME	SALARY
1001	ANIRUDH	45000
1002	SINHCANA	50000
1007	PRASHANT	20000
1003	VINAY	30000
1005	VIDYA	35000
1008	RAJESH	25000

6rows selected

Step 3. Insert a row where employee salary is less than 50000

INSERT INTO EMP_VIEW(ENO,ENAME,SALARY)VALUES(1011,'SNIGDHA',39000)

1 row inserted

Step 4: Display all the rows of a view

SELECT * FROM EMP_VIEW

ENO	ENAME	SALARY
1001	ANIRUDH	45000
1002	SINHCANA	50000
1007	PRASHANT	20000
1003	VINAY	30000
1005	VIDYA	35000
1008	RAJESH	25000
1011	SNIGDHA	39000

Step 5 : Insert a row where employee salary is greater than 50000. This will give an error

INSERT INTO EMP_VIEW(ENO,ENAME,SALARY) VALUES (1012,'SMAYAN',99999)

ORA-01402:view WITH CHECK OPTION where-clause violation

Step 6: Drop View

DROP VIES EMP_VIEW

View dropped