DBMS LAB CIE-2 REPORT

NAME: KIZHAKEL SHARAT PRASAD

USN: 1BM19CS074

SEC: 4-B

BATCH NO: B2

LAB-IN-CHARGE: DR. K. PANIMOZHI

PROGRAM NOS: 6- 10

REPORT:

DBMS WEEK-6

Consider the schema for Movie Database: ACTOR(Act_id, Act_Name, Act_Gender) DIRECTOR(Dir_id, Dir_Name, Dir_Phone) MOVIES(Mov_id, Mov_Title, Mov_Year, Mov_Lang, Dir_id) MOVIE_CAST(Act_id, Mov_id, Role) RATING(Mov_id, Rev_Stars) Write SQL queries to:

1. List the titles of all movies directed by 'Hitchcock'.

2. Find the movie names where one or more actors acted in two or more movies.

3. List all actors who acted in a movie before 2000 and also in a movie after 2015 (use JOIN operation).

4. Find the title of movies and number of stars for each movie that has at least one rating and find the highest number of stars that movie received. Sort the result by movie title.

5. Update rating of all movies directed by 'Steven Spielberg' to 5.

OUTPUT:

1. List the titles of all movies directed by ‘Hitchcock’.

Query 1 | Insurance_DB | ORDERS_DB | bank_db | movie_db | supplier | stud_fac | college_db

Limit to 1000 rows

```
(14,1005,'guest');
INSERT INTO rating values
(1004,5),
(1003,4),
(1002,3),
(1001,4),
(1005,2);

/*1. List the titles of all movies directed by ‘Hitchcock’.*/
SELECT movies.movie_title FROM director,movies WHERE director.dir_id=movies.dir_id AND di
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

movie_title
Star Wars

2. Find the movie names where one or more actors acted in two or more movies.

```
/*2. Find the movie names where one or more actors acted in two or more movies.*/
SELECT movie_TITLE FROM movies,movie_cast WHERE movies.movie_id=movie_cast.movie_id and actor_id IN

/*3. List all actors who acted in a movie before 2000 and also in a movie after 2015 (use JOIN oper
SELECT actor_name,movie_title,movie_year from actor join movie_cast on actor.actor_id=movie_cast.ac
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

movie_TITLE
After Earth
The A team

3. List all actors who acted in a movie before 2000 and also in a movie after 2015 (use JOIN operation).

```
/*3. List all actors who acted in a movie before 2000 and also in a movie after 2015 (use JOIN ope
SELECT actor_name,movie_title,movie_year from actor join movie_cast on actor.actor_id=movie_cast.a

/*4. Find the title of movies and number of stars for each movie that has at least one rating and
    number of stars that movie received. Sort the result by movie title.*/
SELECT movie_title,max(rev_star) FROM movies,rating WHERE movies.movie_id=rating.movie_id GROUP BY

/*5. Update rating of all movies directed by 'Steven Spielberg' to 5.*/
UPDATE RATING SET rev_star=5 WHERE movie_id IN(SELECT MOVIE_ID FROM movies.director WHERE movies.d
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

actor_name	movie_title	movie_year
Courtney	Sopranos	1999
James	The A team	2020

4. Find the title of movies and number of stars for each movie that has at least one rating and find the highest number of stars that movie received. Sort the result by movie title.

```
/*3. List all actors who acted in a movie before 2000 and also in a movie after 2015 (use JOIN
SELECT actor_name,movie_title,movie_year from actor join movie_cast on actor.actor_id=movie_cas

/*4. Find the title of movies and number of stars for each movie that has at least one rating a
    number of stars that movie received. Sort the result by movie title.*/
SELECT movie_title,max(rev_star) FROM movies,rating WHERE movies.movie_id=rating.movie_id GROUI

/*5. Update rating of all movies directed by 'Steven Spielberg' to 5.*/
UPDATE RATING SET rev_star=5 WHERE movie_id IN(SELECT MOVIE_ID FROM movies,director WHERE movie
SELECT*FROM rating;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

movie_title	max(rev_star)
After Earth	5
Oceans 11	5
Sopranos	5
Star Wars	4
The A team	2

5. Update rating of all movies directed by 'Steven Spielberg' to 5.

Query 1 | Insurance_DB | ORDERS_DB | bank_db | movie_db | supplier | stud_fac | college_db

Limit to 1000 rows

```
/*3. List all actors who acted in a movie before 2000 and also in a movie after 2015 (use JOIN op
SELECT actor_name,movie_title,movie_year from actor join movie_cast on actor.actor_id=movie_cast.

/*4. Find the title of movies and number of stars for each movie that has at least one rating and
    number of stars that movie received. Sort the result by movie title.*/
SELECT movie_title,max(rev_star) FROM movies,rating WHERE movies.movie_id=rating.movie_id GROUP B

/*5. Update rating of all movies directed by 'Steven Spielberg' to 5.*/
UPDATE RATING SET rev_star=5 WHERE movie_id IN(SELECT MOVIE_ID FROM movies,director WHERE movies.
SELECT*FROM rating;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

movie_id	rev_star
1001	5
1002	5
1003	4
1004	5
1005	2

**********WEEK 6 ENDS********

DBMS WEEK-7

Consider the following database that keeps track of airline flight information:
FLIGHTS (flno: integer, from: string, to: string, distance: integer, departs: time, arrives: time, price: integer)
AIRCRAFT (aid: integer, aname: string, cruisingrange: integer)
CERTIFIED (eid: integer, aid: integer)
EMPLOYEE (eid: integer, ename: string, salary: integer)
Note that the Employees relation describes pilots and other kinds of employees as well; Every pilot is certified for some aircraft, and only pilots are certified to fly.

Write each of the following queries in SQL.

i. Find the names of aircraft such that all pilots certified to operate them have salaries more than Rs.80,000.

ii. For each pilot who is certified for more than three aircrafts, find the eid and the maximum cruising range of the aircraft for which she or he is certified.

iii. Find the names of pilots whose salary is less than the price of the cheapest route from Bengaluru to Frankfurt.

iv. For all aircraft with cruising range over 1000 Kms, find the name of the aircraft and the average salary of all pilots certified for this aircraft.

v. Find the names of pilots certified for some Boeing aircraft.

vi. Find the aids of all aircraft that can be used on routes from Bengaluru to New Delhi.

vii. A customer wants to travel from Madison to New York with no more than two changes of flight. List the choice of departure times from Madison if the customer wants to arrive in New York by 6 p.m.

viii. Print the name and salary of every non-pilot whose salary is more than the average salary for pilots.

OUTPUT:

i. Find the names of aircraft such that all pilots certified to operate them have salaries more than Rs.80,000.

```
(12,'RAVI',25000),
(15,'BOB',45000),
(13,'NEIL',90000),
(14,'NIKHIL',10000);

/*i. Find the names of aircraft such that all pilots certified to operate them have salaries more than
Rs.80,000.*/
SELECT aname FROM AIRCRAFT,CERTIFIED,EMPLOYEES WHERE AIRCRAFT.aid=CERTIFIED.aid and CERTIFIED.eid=EMPLOYEES.eid and salary>80000
/*ii. For each pilot who is certified for more than three aircrafts, find the eid and the maximum cruising
range of the aircraft for which she or he is certified.*/
SELECT CERTIFIED.eid,AIRCRAFT.cruisingrange FROM AIRCRAFT,CERTIFIED,EMPLOYEES WHERE AIRCRAFT.aid=CERTIFIED.aid and CERTIFIED.eid
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

aname
BOEING-404

ii. For each pilot who is certified for more than three aircrafts, find the eid and the maximum cruising range of the aircraft for which she or he is certified.

```
(14,'NIKHIL',10000);

/*i. Find the names of aircraft such that all pilots certified to operate them have salaries more than
Rs.80,000.*/
SELECT aname FROM AIRCRAFT,CERTIFIED,EMPLOYEES WHERE AIRCRAFT.aid=CERTIFIED.aid and CERTIFIED.eid=EMPLOYE
/*ii. For each pilot who is certified for more than three aircrafts, find the eid and the maximum cruisir
range of the aircraft for which she or he is certified.*/
SELECT CERTIFIED.eid,AIRCRAFT.cruisingrange FROM AIRCRAFT,CERTIFIED,EMPLOYEES WHERE AIRCRAFT.aid=CERTIFIE

/*iii. Find the names of pilots whose salary is less than the price of the cheapest route from Bengaluru
Frankfurt.*/
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

eid	cruisingrange
14	2000

iii. Find the names of pilots whose salary is less than the price of the cheapest route from Bengaluru to Frankfurt.

```
range of the aircraft for which she or he is certified.*/
SELECT CERTIFIED.eid,AIRCRAFT.cruisingrange FROM AIRCRAFT,CERTIFIED,EMPLOYEES WHERE AIRCRAFT.aid=CERTIFIED.aid and CERTIF

/*iii. Find the names of pilots whose salary is less than the price of the cheapest route from Bengaluru to
Frankfurt.*/
SELECT DISTINCT(ename) FROM EMPLOYEES,CERTIFIED WHERE EMPLOYEES.eid=CERTIFIED.eid and EMPLOYEES.salary<(SELECT MIN(price)
/*iv. For all aircraft with cruising range over 1000 Kms, find the name of the aircraft and the average
salary of all pilots certified for this aircraft.*/
SELECT aname,AVG(salary) FROM AIRCRAFT,EMPLOYEES,CERTIFIED WHERE AIRCRAFT.aid=CERTIFIED.aid and CERTIFIED.eid=EMPLOYEES.e
/*v. Find the names of pilots certified for some Boeing aircraft.*/
SELECT DISTINCT(ename) FROM EMPLOYEES,CERTIFIED,AIRCRAFT WHERE AIRCRAFT.aid=CERTIFIED.aid and CERTIFIED.eid=EMPLOYEES.eid
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

ename
RAVI
BOB
NIKHIL

iv. For all aircraft with cruising range over 1000 Kms, find the name of the aircraft and the average salary of all pilots certified for this aircraft.

```
range of the aircraft for which she or he is certified.*/
SELECT CERTIFIED.eid,AIRCRAFT.cruisingrange FROM AIRCRAFT,CERTIFIED,EMPLOYEES WHERE AIRCRAFT.aid=CERTIFIED

/*iii. Find the names of pilots whose salary is less than the price of the cheapest route from Bengaluru t
Frankfurt.*/
SELECT DISTINCT(ename) FROM EMPLOYEES,CERTIFIED WHERE EMPLOYEES.eid=CERTIFIED.eid and EMPLOYEES.salary<(SE
/*iv. For all aircraft with cruising range over 1000 Kms, find the name of the aircraft and the average
salary of all pilots certified for this aircraft.*/
SELECT aname,AVG(salary) FROM AIRCRAFT,EMPLOYEES,CERTIFIED WHERE AIRCRAFT.aid=CERTIFIED.aid and CERTIFIED.
/*v. Find the names of pilots certified for some Boeing aircraft.*/
SELECT DISTINCT(ename) FROM EMPLOYEES,CERTIFIED,AIRCRAFT WHERE AIRCRAFT.aid=CERTIFIED.aid and CERTIFIED.ei
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

aname	AVG(salary)
SUKHOI-30	27500.0000
MIRAGE 2000	10000.0000
BOEING-747	17500.0000
BOEING-404	50000.0000

v. Find the names of pilots certified for some Boeing aircraft.

```
/*iii. Find the names of pilots whose salary is less than the price of the cheapest route from Bengaluru to
Frankfurt.*/
SELECT DISTINCT(ename) FROM EMPLOYEES,CERTIFIED WHERE EMPLOYEES.eid=CERTIFIED.eid and EMPLOYEES.salary<(SELECT MIN(price) FROM
/*iv. For all aircraft with cruising range over 1000 Kms, find the name of the aircraft and the average
salary of all pilots certified for this aircraft.*/
SELECT aname,AVG(salary) FROM AIRCRAFT,EMPLOYEES,CERTIFIED WHERE AIRCRAFT.aid=CERTIFIED.aid and CERTIFIED.eid=EMPLOYEES.eid AN
/*v. Find the names of pilots certified for some Boeing aircraft.*/
SELECT DISTINCT(ename) FROM EMPLOYEES,CERTIFIED,AIRCRAFT WHERE AIRCRAFT.aid=CERTIFIED.aid and CERTIFIED.eid=EMPLOYEES.eid AND
/*vi. Find the aids of all aircraft that can be used on routes from Bengaluru to New Delhi.*/
SELECT DISTINCT(aid) FROM AIRCRAFT,FLIGHTS WHERE AIRCRAFT.cruisingrange>=(SELECT FLIGHTS.distance FROM FLIGHTS WHERE flights.f
/*vii. A customer wants to travel from bangalore to mumbai with no more than two changes of flight. List
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

ename
RAVI
NIKHIL
NEIL

vi. Find the aids of all aircraft that can be used on routes from Bengaluru to New Delhi.

```
SELECT DISTINCT(ename) FROM EMPLOYEES,CERTIFIED WHERE EMPLOYEES.eid=CERTIFIED.eid and EMPLOYEES.salary<(SELECT M
/*iv. For all aircraft with cruising range over 1000 Kms, find the name of the aircraft and the average
salary of all pilots certified for this aircraft.*/
SELECT aname,AVG(salary) FROM AIRCRAFT,EMPLOYEES,CERTIFIED WHERE AIRCRAFT.aid=CERTIFIED.aid and CERTIFIED.eid=EM
/*v. Find the names of pilots certified for some Boeing aircraft.*/
SELECT DISTINCT(ename) FROM EMPLOYEES,CERTIFIED,AIRCRAFT WHERE AIRCRAFT.aid=CERTIFIED.aid and CERTIFIED.eid=EMPL
/*vi. Find the aids of all aircraft that can be used on routes from Bengaluru to New Delhi.*/
SELECT DISTINCT(aid) FROM AIRCRAFT,FLIGHTS WHERE AIRCRAFT.cruisingrange>=(SELECT FLIGHTS.distance FROM FLIGHTS W
/*vii. A customer wants to travel from bangalore to mumbai with no more than two changes of flight. List
the choice of departure times from bangalore if the customer wants to arrive in mumbai by 6 p.m.*/
SELECT F.departs FROM FLIGHTS F WHERE F.flno IN((SELECT F0.flno FROM FLIGHTS F0 WHERE F0.ffrom='bangalore' AND
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

aid
1
2
3
5

vii. A customer wants to travel from Madison to New York with no more than two changes of flight. List the choice of departure times from Madison if the customer wants to arrive in New York by 6 p.m.

```
/*iv. For all aircraft with cruising range over 1000 Kms, find the name of the aircraft and the average
salary of all pilots certified for this aircraft.*/
SELECT aname,AVG(salary) FROM AIRCRAFT,EMPLOYEES,CERTIFIED WHERE AIRCRAFT.aid=CERTIFIED.aid and CERTIFIED.eid=EMPLOYEES.eid AND A
/*v. Find the names of pilots certified for some Boeing aircraft.*/
SELECT DISTINCT(ename) FROM EMPLOYEES,CERTIFIED,AIRCRAFT WHERE AIRCRAFT.aid=CERTIFIED.aid and CERTIFIED.eid=EMPLOYEES.eid AND ana
/*vi. Find the aids of all aircraft that can be used on routes from Bengaluru to New Delhi.*/
SELECT DISTINCT(aid) FROM AIRCRAFT,FLIGHTS WHERE AIRCRAFT.cruisingrange>=(SELECT FLIGHTS.distance FROM FLIGHTS WHERE flights.ffro
/*vii. A customer wants to travel from bangalore to mumbai with no more than two changes of flight. List
the choice of departure times from bangalore if the customer wants to arrive in mumbai by 6 p.m.*/
SELECT F.departs FROM FLIGHTS F WHERE F.flno IN((SELECT F0.flno FROM FLIGHTS F0 WHERE F0.ffrom='bangalore' AND F0.fto='mumbai' A
UNION (SELECT F0.flno FROM FLIGHTS F0,FLIGHTS F1 WHERE F0.ffrom='bangalore' AND F1.ffrom=F0.fto AND F1.fto='mumbai' AND F1.depar
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

departs
17:00:00

viii. Print the name and salary of every non-pilot whose salary is more than the average salary for pilots.

```
SELECT DISTINCT(ename) FROM EMPLOYEES,CERTIFIED,AIRCRAFT WHERE AIRCRAFT.aid=CERTIFIED.aid and CERTIFIED.eid=EMPLOYEES.eid AND aname LIKE '%BO
/*vi. Find the aids of all aircraft that can be used on routes from Bengaluru to New Delhi.*/
SELECT DISTINCT(aid) FROM AIRCRAFT,FLIGHTS WHERE AIRCRAFT.cruisingrange>=(SELECT FLIGHTS.distance FROM FLIGHTS WHERE flights.ffrom='bangalore
/*vii. A customer wants to travel from bangalore to mumbai with no more than two changes of flight. List
the choice of departure times from bangalore if the customer wants to arrive in mumbai by 6 p.m.*/
SELECT F.departs FROM FLIGHTS F WHERE F.flno IN((SELECT F0.flno FROM FLIGHTS F0 WHERE F0.ffrom='bangalore' AND F0.fto='mumbai' AND EXTRACT(h
UNION (SELECT F0.flno FROM FLIGHTS F0,FLIGHTS F1 WHERE F0.ffrom='bangalore' AND F1.ffrom=F0.fto AND F1.fto='mumbai' AND F1.departs>F0.arrive
UNION (SELECT F0.flno FROM FLIGHTS F0,FLIGHTS F1,FLIGHTS F2 WHERE F0.ffrom='bangalore' AND F1.ffrom=F0.fto AND F2.ffrom=F1.fto AND F2.fto='m
/*viii. Print the name and salary of every non-pilot whose salary is more than the average salary for pilots.*/
SELECT DISTINCT(ename),salary FROM EMPLOYEES WHERE EMPLOYEES.eid NOT IN(SELECT DISTINCT(CERTIFIED.eid) FROM CERTIFIED) AND EMPLOYEES.salary>(
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

ename	salary
RAMESH	70000

DBMS WEEK 8

Consider the following database for student enrollment for course : STUDENT (snum: integer, sname: string, major: string, level: string, age: integer) CLASS (name: string, meets at: time, room: string, fid: integer) ENROLLED (snum: integer, cname: string) FACULTY (fid: integer, fname: string, deptid: integer) The meaning of these relations is straightforward; for example, Enrolled has one record per student-class pair such that the student is enrolled in the class. Level is a two character code with 4 different values (example: Junior: JR etc) Write the following queries in SQL. No duplicates should be printed in any of the answers.

i. Find the names of all Juniors (level = JR) who are enrolled in a class taught by

ii. Find the names of all classes that either meet in room R128 or have five or more Students enrolled.

iii. Find the names of all students who are enrolled in two classes that meet at the same time.

iv. Find the names of faculty members who teach in every room in which some class is taught.

v. Find the names of faculty members for whom the combined enrollment of the courses that they teach is less than five.

vi. Find the names of students who are not enrolled in any class.

vii. For each age value that appears in Students, find the level value that appears most often. For example, if there are more FR level students aged 18 than SR, JR, or SO students aged 18, you should print the pair (18, FR).

OUTPUT:

i. Find the names of all Juniors (level = JR) who are enrolled in a class taught by

```
(4,'class5'),
(5,'class5');

select * from enrolled;
select*from Class;
select * from Student;
select * from Faculty;

/*i. Find the names of all Juniors (level = JR) who are enrolled in a class taught by Harish */
SELECT sname FROM student,faculty,class,enrolled WHERE student.snum= enrolled.snum and enrolled
```

Result Grid

fid	fname	deptid
11	Harish	1000
12	MV	1000
13	Mira	1001
14	Shiva	1002
15	Nupur	1000

ii. Find the names of all classes that either meet in room R128 or have five or more Students enrolled.

```
/*ii. Find the names of all classes that either meet in room R128 or have five or more Students
SELECT class.cname FROM class where room='R128' OR class.cname IN(SELECT enrolled.cname FROM enr

/*iii. Find the names of all students who are enrolled in two classes that meet at the same time
select sname from Student where snum in (select e1.snum from Enrolled e1,Enrolled e2,Class c1,Cl
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

sname
Tom

iii. Find the names of all students who are enrolled in two classes that meet at the same time.

```
/*iii. Find the names of all students who are enrolled in two classes that meet at the same time.*/
select sname from Student where snum in (select e1.snum from Enrolled e1,Enrolled e2,Class c1,Class
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

cname
class10
class5
NULL

iv. Find the names of faculty members who teach in every room in which some class is taught.

```
/*iv. Find the names of faculty members who teach in every room in which some class is taught.*/
SELECT fname FROM faculty WHERE NOT EXISTS(select room from class where room not in(select distin

/*v. Find the names of faculty members for whom the combined enrollment of the courses that they
teach is less than five.*/
SELECT distinct fname FROM faculty WHERE 5>(SELECT count(enrolled.snum) from enrolled,class where
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

sname
Rahul

v. Find the names of faculty members for whom the combined enrollment of the courses that they teach is less than five.

```
/*v. Find the names of faculty members for whom the combined enrollment of the courses that they
teach is less than five.*/
SELECT distinct fname FROM faculty WHERE 5>(SELECT count(enrolled.snum) from enrolled,class where

/*vi. Find the names of students who are not enrolled in any class.*/
select sname from Student where snum not in (select snum from Enrolled);
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

fname
Harish
MV
Mira
Shiva

vi. Find the names of students who are not enrolled in any class.

```
/*v. Find the names of faculty members for whom the combined enrollment of the courses that they
teach is less than five.*/
SELECT distinct fname FROM faculty WHERE 5>(SELECT count(enrolled.snum) from enrolled,class where en

/*vi. Find the names of students who are not enrolled in any class.*/
select sname from Student where snum not in (select snum from Enrolled);
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

sname
Rita

vii. For each age value that appears in Students, find the level value that appears most often. For example, if there are more FR level students aged 18 than SR, JR, or SO students aged 18, you should print the pair (18, FR).

```
/*vii. For each age value that appears in Students, find the level value that appears most often. Fo
example, if there are more FR level students aged 18 than SR, JR, or SO students aged 18, you
should print the pair (18, FR).*/

select S.age, S.lvl from Student S group by S.age, S.lvl having S.lvl in (select S1.lvl from Student
group by S1.lvl, S1.age having count(*) >= all (select count(*) from Student S2
where s1.age = S2.age group by S2.lvl, S2.age));
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

age	lvl
19	Sr
20	Jr
21	Sr

**********WEEK8 ENDS********

DBMS WEEK 9

Consider the following schema: SUPPLIERS (sid: integer, sname: string, address: string) PARTS (pid: integer, pname: string, color: string) CATALOG (sid: integer, pid: integer, cost: real) The Catalog relation lists the prices charged for parts by Suppliers. Write the following queries in SQL:

i) Find the pnames of parts for which there is some supplier.

ii) Find the snames of suppliers who supply every part.

iii) Find the snames of suppliers who supply every red part.

iv) Find the pnames of parts supplied by Acme Widget Suppliers and by no one else.

v) Find the sids of suppliers who charge more for some part than the average cost of that part (averaged over all the suppliers who supply that part).

vi) For each part, find the sname of the supplier who charges the most for that part.

OUTPUT:

i) Find the pnames of parts for which there is some supplier.

Query 1 | Insurance_DB | ORDERS_DB | bank_db | movie_db | supplier | stud_fac | college_d

Limit to 1000 rows

```
SELECT*FROM catalog;
SELECT*FROM parts;
SELECT*FROM suppliers;
/*1)Find the pnames of parts for which there is some supplier.*/
SELECT distinct pname FROM parts,catalog WHERE parts.pid=catalog.pid;
/*2)Find the snames of suppliers who supply every part.*/
SELECT sname FROM suppliers,parts,catalog WHERE suppliers.sid=catalog.sid GROUP
/*3) Find the snames of suppliers who supply every red part.*/
SELECT DISTINCT sname FROM suppliers,catalog,parts WHERE suppliers.sid=catalog.s
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

pname
Book
Pen
Pencil
Mobile
Charger

ii) Find the snames of suppliers who supply every part.

```
/*1)Find the pnames of parts for which there is some supplier.*/
SELECT distinct pname FROM parts,catalog WHERE parts.pid=catalog.pid;
/*2)Find the snames of suppliers who supply every part.*/
SELECT sname FROM suppliers,parts,catalog WHERE suppliers.sid=catalog.sid GROUP BY Catalog.sid AND
/*3) Find the snames of suppliers who supply every red part.*/
SELECT DISTINCT sname FROM suppliers,catalog,parts WHERE suppliers.sid=catalog.sid AND catalog.pid

/*4)Find the pnames of parts supplied by Acme Widget Suppliers and by no one else.*/
select pname from Parts,Catalog,Suppliers where Catalog.pid=Parts.pid and Catalog.sid=Suppliers.si
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

sname
Acme Widget

iii) Find the snames of suppliers who supply every red part.

Query 1 | Insurance_DB | ORDERS_DB | bank_db | movie_db | supplier | stud_fac | college_db

Limit to 1000 rows

```
/*2)Find the snames of suppliers who supply every part.*/
SELECT sname FROM suppliers,parts,catalog WHERE suppliers.sid=catalog.sid GROUP BY Catalog.sid AN
/*3) Find the snames of suppliers who supply every red part.*/
SELECT DISTINCT sname FROM suppliers,catalog,parts WHERE suppliers.sid=catalog.sid AND catalog.pi

/*4)Find the pnames of parts supplied by Acme Widget Suppliers and by no one else.*/
select pname from Parts,Catalog,Suppliers where Catalog.pid=Parts.pid and Catalog.sid=Suppliers.s

/*5) Find the sids of suppliers who charge more for some part than the average cost of that part
over all the suppliers who supply that part).*/
SELECT distinct c.sid FROM catalog c WHERE c.cost>(SELECT AVG(c1.cost) FROM catalog c1 WHERE c1.p
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

sname
Acme Widget
Johns

iv) Find the pnames of parts supplied by Acme Widget Suppliers and by no one else.

```
/*4)Find the pnames of parts supplied by Acme Widget Suppliers and by no one else.*/
select pname from Parts,Catalog,Suppliers where Catalog.pid=Parts.pid and Catalog.sid=Suppliers.sid
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

pname
Mobile
Charger

v) Find the sids of suppliers who charge more for some part than the average cost of that part (averaged over all the suppliers who supply that part).

```
/*5) Find the sids of suppliers who charge more for some part than the average cost of that part
over all the suppliers who supply that part).*/
SELECT distinct c.sid FROM catalog c WHERE c.cost>(SELECT AVG(c1.cost) FROM catalog c1 WHERE c1.p
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

sid
10002
10004

vi) For each part, find the sname of the supplier who charges the most for that part.

```
/*6) For each part, find the sname of the supplier who charges the most for that part.*/
SELECT p.pid,s.sname from parts p,suppliers s,Catalog c where c.pid=p.pid and c.sid=s.sid and c.
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

pid	sname
20001	Acme Widget
20004	Acme Widget
20005	Acme Widget
20001	Johns
20002	Johns

*********WEEK9 ENDS********

DBMS WEEK-10

Consider the schema for College Database: 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, FinalIA) Write SQL queries to:

1. List all the student details studying in fourth semester 'C'section.

2. Compute the total number of male and female students in each semester and in each section.

3. Create a view of Test1 marks of student USN '1BI15CS101' in all subjects.

4. Calculate the FinalIA (average of best two test marks) and update the corresponding table for all students.

5. Categorize students based on the following criterion: If FinalIA = 17 to 20 then CAT = 'Outstanding' If FinalIA = 12 to 16 then CAT = 'Average' If FinalIA< 12 then CAT = 'Weak' Give these details only for 8th semester A, B, and C section students.

OUTPUT:

1. List all the student details studying in fourth semester 'C'section.

1. List all the student details studying in fourth semester ‘C’section.

Query 1 | Insurance_DB | ORDERS_DB | bank_db | movie_db | supplier | stud_fac | college_db*

Limit to 1000 rows

```
SELECT*FROM SUBJECT;
/*1. List all the student details studying in fourth semester ‘C’section.*/
SELECT STUDENT.*,SEMSEC.SEM,SEMSEC.SEC FROM STUDENT,SEMSEC,CLASS WHERE STUDENT.USN=CLASS.USN AND
/*2. Compute the total number of male and female students in each semester and in each section. *
SELECT SEMSEC.SEM,SEMSEC.SEC,STUDENT.gender,COUNT(GENDER) FROM STUDENT,CLASS,SEMSEC WHERE STUDENT
/*3. Create a view of Test1 marks of student USN ‘1BI15CS101’ in all subjects. */
DROP VIEW TEST1;
CREATE VIEW TEST1 AS SELECT TEST1,SUBJECT.SUBCODE FROM IAMARKS,SUBJECT WHERE IAMARKS.SUBCODE=SUBJ
SELECT*FROM TEST1;

/*4. Calculate the FinalIA (average of best two test marks) and update the corresponding table fo
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

USN	SNAME	ADDRESS	PHONE	GENDER	SEM	SEC
1RN15CS091	SANTOSH	MANGALURU	8812332201	M	4	C

2. Compute the total number of male and female students in each semester and in each section.

```
/*2. Compute the total number of male and female students in each semester and in each section. */
SELECT SEMSEC.SEM,SEMSEC.SEC,STUDENT.gender,COUNT(GENDER) FROM STUDENT,CLASS,SEMSEC WHERE STUDENT.
/*3. Create a view of Test1 marks of student USN '1BI15CS101' in all subjects. */
DROP VIEW TEST1;
CREATE VIEW TEST1 AS SELECT TEST1,SUBJECT.SUBCODE FROM IAMARKS,SUBJECT WHERE IAMARKS.SUBCODE=SUBJE
SELECT*FROM TEST1;

/*4. Calculate the FinalIA (average of best two test marks) and update the corresponding table for
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

SEM	SEC	gender	COUNT(GENDER)
3	A	M	1
3	B	F	1
3	C	M	1
4	A	F	1
4	A	M	1

3. Create a view of Test1 marks of student USN ‘1BI15CS101’ in all subjects.

```
/*3. Create a view of Test1 marks of student USN ‘1BI15CS101’ in all subjects. */
DROP VIEW TEST1;
CREATE VIEW TEST1 AS SELECT TEST1,SUBJECT.SUBCODE FROM IAMARKS,SUBJECT WHERE IAMARKS.SUBCODE=SUBJI
SELECT*FROM TEST1;

/*4. Calculate the FinalIA (average of best two test marks) and update the corresponding table for

UPDATE IAMARKS
SET FINALIA = (TEST1 + TEST2 + TEST3) / 3;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

TEST1	SUBCODE
15	10CS81
12	10CS82
19	10CS83
20	10CS84
15	10CS85

4. Calculate the FinalIA (average of best two test marks) and update the corresponding table for all students.

Query 1 | Insurance_DB | ORDERS_DB | bank_db | movie_db | supplier | stud_fac | college_db

Limit to 1000 rows

```
DROP VIEW TEST1;
CREATE VIEW TEST1 AS SELECT TEST1,SUBJECT.SUBCODE FROM IAMARKS,SUBJECT WHERE IAMARKS.SUBCODE=S
SELECT*FROM TEST1;

/*4. Calculate the FinalIA (average of best two test marks) and update the corresponding table

UPDATE IAMARKS
SET FINALIA = (TEST1 + TEST2 + TEST3) / 3;
SELECT*FROM IAMARKS;

/*5. Categorize students based on the following criterion:
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

USN	SUBCODE	SSID	TEST1	TEST2	TEST3	FINALIA
1RN13CS091	10CS81	CSE8C	15	16	18	16
1RN13CS091	10CS82	CSE8C	12	19	14	15
1RN13CS091	10CS83	CSE8C	19	15	20	18
1RN13CS091	10CS84	CSE8C	20	16	19	18
1RN13CS091	10CS85	CSE8C	15	15	12	14

5. Categorize students based on the following criterion: If FinalIA = 17 to 20 then CAT = 'Outstanding' If FinalIA = 12 to 16 then CAT = 'Average' If FinalIA< 12 then CAT = 'Weak' Give these details only for 8th semester A, B, and C section students.

```
/*5. Categorize students based on the following criterion:
If FinalIA = 17 to 20 then CAT = 'Outstanding'
If FinalIA = 12 to 16 then CAT = 'Average'
If FinalIA< 12 then CAT = 'Weak'
Give these details only for 8th semester A, B, and C section students.*/

SELECT S.*,
CASE
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

USN	SNAME	ADDRESS	PHONE	GENDER	CAT
1RN13CS091	TEESHA	BENGALURU	7712312312	F	Average
1RN13CS091	TEESHA	BENGALURU	7712312312	F	Average
1RN13CS091	TEESHA	BENGALURU	7712312312	F	Outstanding
1RN13CS091	TEESHA	BENGALURU	7712312312	F	Outstanding
1RN13CS091	TEESHA	BENGALURU	7712312312	F	Average

*******WEEK 10 ENDS******