DBMS LAB ASSIGNMENT 5

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1. Consider the following relations.

Suppliers (sid: integer, sName: string, address: string)
Parts (pid: integer, pName: string, color: string)
Catalog (sid: integer, pid: integer, cost: real)

A.
SUPPLIERS:

Suppliers

sid	sName	address
1	Lohith	Guntur
2	Rishi	Mumbai
3	Ankith	Chennai
4	Kishore	Delhi
5	surya	Bangalore

PARTS:

Parts

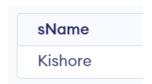| pid	pName	color
1	abc	red
2	xyz	blue
3	lmn	pink
4	pqr	orange
5	cde	black

CATALOG:

Catalog

sid	pid	cost
1	5	1300
2	3	1000
3	2	1700
4	1	600
5	4	1500

1)Find the Names of suppliers who supply some red color part.

SELECT S.sname
FROM Suppliers S, Parts P, Catalog C
where P.color='red' AND C.pid=P.pid AND C.sid=S.sid
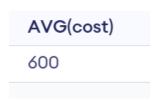
sName
Kishore

2)Find the sids of suppliers who supply some red color part and having office located at 'Chennai'.

SELECT Suppliers.sid FROM Suppliers, Parts, Catalog WHERE
Parts.color='red' AND Suppliers.address='Chennai' AND
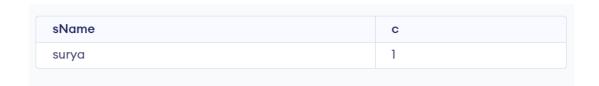 Catalog.pid=Parts.pid AND Catalog.sid=Suppliers.sid;

sid
4

3) Find the average cost of red color parts supplied by various suppliers.

SELECT AVG(cost) FROM Parts, Catalog WHERE Parts.color='red' AND Catalog.pid=Parts.pid;

AVG(cost)
600

4) Find the Names of the supplier who is supplying most number of parts.

select sname,count(sname) as c from suppliers group by sname
order by c Desc limit 1 ;

sName	c
surya	1

5) Find the sids of suppliers who supply every part.

SELECT C.sid
FROM Catalog C
WHERE NOT EXISTS (SELECT P.pid
FROM Parts P
WHERE NOT EXISTS (SELECT C.sid
FROM Catalog C
WHERE C.sid = C.sid
AND C.pid = P.pid));

sid
1
2
3
4
5

6) Find the sids of suppliers who supply every red color part.

SELECT DISTINCT(Suppliers.sid) FROM Suppliers, Parts, Catalog WHERE Parts.color='red' AND Catalog.sid=Suppliers.sid AND Catalog.pid=Parts.pid;

sid
4

7) List the number of suppliers for each color of part.

SELECT color, COUNT(catalog.sid) as Total FROM Catalog, Parts WHERE Catalog.pid=Parts.pid GROUP BY color;

color	Total
black	1
blue	1
orange	1
pink	1
red	1

8) Find the supplier who supplies the red color part at a cheaper rate.

SELECT sName FROM Suppliers, Parts, Catalog WHERE cost=(SELECT MIN(cost) FROM Catalog, Parts WHERE Parts.color='red' AND Catalog.pid=Parts.pid) AND Catalog.sid=Suppliers.sid AND Catalog.pid=Parts.pid;

sName
Kishore

9)For each color part, display the details of the suppliers who supply that part at a cheaper rate.

select parts.pname,suppliers.* from suppliers,parts,catalog where suppliers.sid=catalog.sid and parts.pid=catalog.pid;

pName	sid	sName	address
cde	1	Lohith	Guntur
lmn	2	Rishi	Mumbai
xyz	3	Ankith	Chennai
abc	4	Kishore	Delhi
pqr	5	surya	Bangalore

10) Display the Names of the suppliers along with the number of parts supplied by them.

select suppliers.sname,count(sname) as number_of_parts from suppliers,parts,catalog where suppliers.sid=catalog.sid and parts.pid=catalog.pid group by sname;

sName	number_of_parts
Ankith	1
Kishore	1
Lohith	1
Rishi	1
surya	1

11) Find the details of the supplier who supplies the costliest part.

*select suppliers. * from suppliers,parts,catalog where catalog.cost= (select max(cost) from catalog) and suppliers.sid=catalog.sid and parts.pid=catalog.pid;*

sid	sName	address
3	Ankith	Chennai

12) Display the Names of the suppliers who are selling at least two parts.

select suppliers.sname,count(suppliers.sname) from suppliers group by sname having count(suppliers.sname)>=2;

	sname	count(suppliers.sname)