

# DBMS WEEK 6

- i. Create a database supplier having the tables Supplier, parts, catalog.
- ii. Insert the 5 tuples into each table.

```
20  1,  NATIONAL PARTS HUB , HYDERABAD
29 • select * from supplier;
```

Result Grid | Filter Rows: Edit:

	sid	sname	city
▶	1	Acme Widget Suppliers	Bangalore
	2	Universal Traders	Delhi
	3	Prime Corp	Mumbai
	4	Global Supply Co	Chennai
	5	National Parts Hub	Hyderabad
*	HULL	HULL	HULL

  

```
50 • select * from catalog;
```

51

Result Grid | Filter Rows: Edit:

	sid	pid	cost
▶	1	101	50.00
	1	102	80.00
	1	103	65.00
	1	104	60.00
	1	105	95.00
	2	101	60.00
	3	101	55.00
	3	105	95.00
	4	103	70.00
	5	102	75.00
*	HULL	HULL	HULL

  

```
37 • select * from parts;
```

38

Result Grid | Filter Rows: Edit:

	pid	pname	color
▶	101	Bolt	Red
	102	Nut	Blue
	103	Screw	Red
	104	Washer	Green
	105	Clamp	Yellow
*	HULL	HULL	HULL

iii. Find the pnames of parts for which there are some suppliers.

```
52 •   SELECT DISTINCT P.pname
53     FROM Parts P, Catalog C
54     WHERE P.pid = C.pid;
55
```

Result Grid | Filter Rows: Ex

pname
Bolt
Nut
Screw
Washer
Clamp

iv. Find the snames of suppliers who supply every part.

```
55
56 •   SELECT s.sname
57     FROM Supplier s
58     WHERE NOT EXISTS (
59       SELECT p.pid
60         FROM Parts p
61        WHERE p.pid NOT IN (
62          SELECT c.pid FROM Catalog c WHERE c.sid = s.sid
63        )
64      );
65
66
67
```

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

sname
Acme Widget Suppliers

v. Find the snames of supplier who supply every red part.

```
68 •   SELECT S.sname
69     FROM Supplier S
70     WHERE NOT EXISTS (
71       SELECT P.pid
72         FROM Parts P
73        WHERE P.color = 'Red'
74        AND P.pid NOT IN (
75          SELECT C.pid
76            FROM Catalog C
77            WHERE C.sid = S.sid
78        )
79      );
80
```

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

sname
Acme Widget Suppliers

vi. Find the pnames of parts supplied by acme widget supplier and by no one else.

```
81 •     SELECT P.pname
82      FROM Parts P, Catalog C, Supplier S
83      WHERE P.pid = C.pid
84      AND C.sid = S.sid
85      AND S.sname = 'Acme Widget Suppliers'
86      AND P.pid NOT IN (
87          SELECT C1.pid
88          FROM Catalog C1, Supplier S1
89          WHERE C1.sid = S1.sid
90          AND S1.sname <> 'Acme Widget Suppliers'
91      );
92
```

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

pname
Washer

vii. Find the sides of suppliers who charge more for some part than the average of that part.

```
92
93 •     SELECT DISTINCT C.sid
94      FROM Catalog C
95      WHERE C.cost > (
96          SELECT AVG(C1.cost)
97          FROM Catalog C1
98          WHERE C1.pid = C.pid
99      );
100
101 •    SELECT P.pname, S.sname
```

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

sid
1
2
4

viii. For each part find the sname of the supplier who charges the most for that parts.

```
101 •    SELECT P.pname, S.sname
102      FROM Parts P, Supplier S, Catalog C
103      WHERE P.pid = C.pid
104      AND S.sid = C.sid
105      AND C.cost = (
106          SELECT MAX(C1.cost)
107          FROM Catalog C1
108          WHERE C1.pid = P.pid);
109
```

Setup

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

pname	sname
Nut	Acme Widget Suppliers
Washer	Acme Widget Suppliers
Clamp	Acme Widget Suppliers
Bolt	Universal Traders
Clamp	Prime Corp