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## PROGRAM 7- SUPPLIER DATABASE

```
show databases;
create database SUP ;
use SUP;
CREATE TABLE Supplier (
    sid INT PRIMARY KEY,
    sname VARCHAR(20),
    city VARCHAR(20)
);

CREATE TABLE Parts (
    pid INT PRIMARY KEY,
    pname VARCHAR(20),
    color VARCHAR(20)
);

CREATE TABLE Catalog (
    sid INT,
    pid INT,
    cost int,
    PRIMARY KEY (sid, pid),
    FOREIGN KEY (sid) REFERENCES Supplier(sid),
    FOREIGN KEY (pid) REFERENCES Parts(pid)
);

INSERT INTO Supplier VALUES
(1, 'Big mom', 'Bangalore'),
(2, 'Kaido', 'Chennai'),
(3, 'Shanks', 'Delhi');
select * from supplier;
```

sid	sname	city
1	Big mom	Bangalore
2	Kaido	Chennai
3	Shanks	Delhi
NULL	NULL	NULL

```
INSERT INTO Parts VALUES
(101, 'bankai', 'Red'),
(102, 'shikai', 'Green'),
```

```
(103, 'quincy', 'Red'),
(104, 'espada', 'Blue');
select * from parts;
```

pid	pname	color
101	bankai	Red
102	shikai	Green
103	quincy	Red
104	espada	Blue
NULL	NULL	NULL

```
INSERT INTO Catalog VALUES
```

```
(1, 101, 50),
(1, 102, 40),
(2, 101, 45),
(2, 103, 60),
(3, 102, 38),
(3, 104, 70);
select * from catalog;
```

sid	pid	cost
1	101	50
1	102	40
2	101	45
2	103	60
3	102	38
3	104	70
NULL	NULL	NULL

```
SELECT DISTINCT p.pname
FROM Parts p
JOIN Catalog c ON p.pid = c.pid;
```

pname
bankai
shikai
quincy
espada

```
SELECT s.sname
FROM Supplier s
```

```

JOIN Catalog c ON s.sid = c.sid
GROUP BY s.sname
HAVING COUNT(DISTINCT c.pid) = (SELECT COUNT(*) FROM Parts);

```

sname
-------

```

SELECT s.sname
FROM Supplier s
JOIN Catalog c ON s.sid = c.sid
JOIN Parts p ON p.pid = c.pid
WHERE p.color = 'Red'
GROUP BY s.sname
HAVING COUNT(DISTINCT p.pid) = (
    SELECT COUNT(*) FROM Parts WHERE color = 'Red'
);

```

sname
Kaido

```

SELECT p.pname
FROM Parts p
JOIN Catalog c ON p.pid = c.pid
JOIN Supplier s ON s.sid = c.sid
GROUP BY p.pname
HAVING COUNT(DISTINCT s.sid) = 1
    AND MAX(s.sname) = 'Acme Widget Suppliers';

```

pname
-------

```

SELECT DISTINCT c1.sid
FROM Catalog c1
WHERE c1.cost > (
    SELECT AVG(c2.cost)
    FROM Catalog c2
    WHERE c2.pid = c1.pid
);

```

sid
1

```

SELECT p.pname, s.sname
FROM Parts p
JOIN Catalog c ON p.pid = c.pid
JOIN Supplier s ON s.sid = c.sid
WHERE c.cost = (
    SELECT MAX(c2.cost)
    FROM Catalog c2
    WHERE c2.pid = p.pid
);

```

pname	sname
bankai	Big mom
shikai	Big mom
quincy	Kaido
espada	Shanks