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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