

Suppliers Database

```
create database Dsupplier ;
use Dsupplier;
```

-- 2. CREATE SUPPLIER TABLE

```
CREATE TABLE Supplier (
    sid INTEGER PRIMARY KEY,
    sname VARCHAR(50) NOT NULL,
    city VARCHAR(50)
);
```

-- 3. INSERT DATA INTO SUPPLIER

```
INSERT INTO Supplier (sid, sname, city) VALUES
(101, 'Smith', 'London'),
(102, 'Jones', 'Paris'),
(103, 'Blake', 'New York'),
(104, 'Clark', 'London');
```

-- 4. CREATE PARTS TABLE

```
CREATE TABLE Parts (
    pid INTEGER PRIMARY KEY,
    pname VARCHAR(50) NOT NULL,
    color VARCHAR(20)
);
```

-- 5. INSERT DATA INTO PARTS

```
INSERT INTO Parts (pid, pname, color) VALUES
(10, 'Bolt', 'Red'),
(20, 'Nut', 'Green'),
(30, 'Cam', 'Blue'),
(40, 'Screw', 'Red');
```

-- 6. CREATE CATALOG (Relationship Table)

```
CREATE TABLE Catalog (
    sid INTEGER,
    pid INTEGER,
    cost DECIMAL(10, 2) NOT NULL,
    PRIMARY KEY (sid, pid),
    FOREIGN KEY (sid) REFERENCES Supplier(sid),
    FOREIGN KEY (pid) REFERENCES Parts(pid)
);
```

-- 7. INSERT DATA INTO CATALOG

```
INSERT INTO Catalog (sid, pid, cost) VALUES
(101, 10, 5.00),
(101, 20, 10.00),
(101, 30, 2.50),
(102, 20, 12.00),
(102, 40, 8.50),
(103, 10, 4.50),
(103, 40, 7.00);
```

-- 8. FIND THE P NAMES OF APPROPRIATE RECORDS IN EACH TABLE

```
SELECT distinct p.pname
from Parts p , Catalog c
where p.pid = c.pid;
```

Output:

Result Grid	
	pname
▶	Bolt
	Nut
	Cam
	Screw

-- 9. find sname s of suppliers who supply every part

```
select distinct s.sname
from supplier s , catalog c
where s.sid = c.sid;
```

```
select distinct s.sname
from Supplier s ,catalog c
where s.sid =c.sid;
```

Output:

Result Grid	
	sname
▶	Smith
	Jones
	Blake

-- 10. FIND THE sname from suppliers wh supply red part

```
SELECT S.sname
FROM
    Supplier S
JOIN
    Catalog C ON S.sid = C.sid
JOIN
    Parts P ON C.pid = P.pid
WHERE
```

P. color = 'Red';

Output:

	sname
▶	Smith
	Blake
	Jones
	Blake

-- 11. Find the pnames of parts supplied by Acme Widget Suppliers and by no one else.

```
select p.pname  
from parts p , supplier s ,Catalog c  
where s.sid = c.sid and c.pid = p.pid and s.sname = "smith" || "jones";
```

Output:

	pname
▶	Bolt
	Nut
	Cam

-12. Find the sids of suppliers who charge more for some parts than the average cost of that part

```
select sid  
from Catalog  
where cost > (select avg(cost)
```

```
from Catalog );
```

Output:

Result Grid		Filter Rows
sid		
101		
102		
102		

-13. for each part, find the sname of the supplier who charges the most for that part

```
SELECT
    P.pname,
    S.sname,
    C.cost
FROM
    Supplier S
JOIN
    Catalog C ON S.sid = C.sid
JOIN
    Parts P ON C.pid = P.pid
WHERE
    C.cost = (
        SELECT MAX(cost)
        FROM Catalog
        WHERE pid = C.pid
    );
```

Ouput:

	Result Grid		Filter Rows
	pname	sname	cost
▶	Bolt	Smith	5.00
	Nut	Jones	12.00
	Cam	Smith	2.50
	Screw	Jones	8.50