

## SUPPLIER

```
CREATE DATABASE TEJAS;
```

```
USE TEJAS;
```

```
CREATE TABLE Supplier (
```

```
    sid INT PRIMARY KEY,
```

```
    sname VARCHAR(50),
```

```
    city VARCHAR(50)
```

```
);
```

```
CREATE TABLE Parts (
```

```
    pid INT PRIMARY KEY,
```

```
    pname VARCHAR(50),
```

```
    color VARCHAR(20)
```

```
);
```

```
CREATE TABLE Catalog (
```

```
    sid INT,
```

```
    pid INT,
```

```
    cost DECIMAL(10,2),
```

```
    PRIMARY KEY (sid, pid),
```

```
    FOREIGN KEY (sid) REFERENCES Supplier(sid),
```

```
    FOREIGN KEY (pid) REFERENCES Parts(pid)
```

```
);
```

```
INSERT INTO Supplier VALUES
```

```
(1, 'Acme Widget Suppliers', 'Delhi'),
```

```
(2, 'Best Supplies', 'Mumbai'),
```

```
(3, 'Quality Parts Co', 'Delhi');
```

```
INSERT INTO Parts VALUES
```

```
(101, 'Bolt', 'red'),
```

```
(102, 'Nut', 'blue'),
```

```
(103, 'Screw', 'red');
```

```
INSERT INTO Catalog VALUES
```

```
(1,101,50),
```

```
(1,103,70),
```

```
(2,101,55),
```

```
(2,102,40),
```

```
(3,101,60),
```

```
(3,102,42),
```

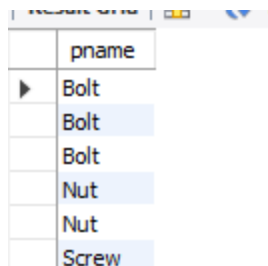
```
(3,103,75);
```

## QUERIES

```
SELECT pname
```

```
FROM Parts, Catalog
```

```
WHERE Parts.pid = Catalog.pid;
```



	pname
▶	Bolt
	Bolt
	Bolt
	Nut
	Nut
	Screw

```
SELECT sname
```

```
FROM Supplier S
```

```
WHERE NOT EXISTS (
```

```
    SELECT *
```

```

FROM Parts

WHERE pid NOT IN (

    SELECT pid FROM Catalog WHERE sid = S.sid

)

);

```

	sname
►	Quality Parts Co

```

SELECT sname

FROM Supplier S

WHERE NOT EXISTS (

    SELECT *

    FROM Parts

    WHERE color = 'red'

    AND pid NOT IN (

        SELECT pid FROM Catalog WHERE sid = S.sid

    )

);

```

	sname
►	Acme Widget Suppliers
	Quality Parts Co

```

SELECT pname

FROM Parts

WHERE pid IN (

    SELECT pid

```

```

FROM Catalog

WHERE sid = (SELECT sid FROM Supplier WHERE sname='Acme Widget Suppliers')

GROUP BY pid

HAVING COUNT(*) = 1

);

```

	pname
▶	Bolt
	Screw

```

SELECT C.sid

FROM Catalog C

GROUP BY C.sid, C.pid, C.cost

HAVING C.cost >

(

SELECT AVG(cost)

FROM Catalog

WHERE pid = C.pid

);

```

	sid
▶	3
	3
	3

```

SELECT pid, sid, cost

FROM Catalog C

WHERE cost = (

SELECT MAX(cost)

FROM Catalog

```

WHERE pid = C.pid

);

pid	sid	cost
101	3	60.00
102	3	42.00
103	3	75.00
NULL	NULL	NULL