

LAB 3- Supplier Database

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4-D

QUERIES:

```
create database supplier;
```

```
use supplier;
```

```
create table SUPPLIERS(sid integer,sname varchar(20),address  
varchar(40),primary key(sid));
```

```
INSERT INTO `supplier`.`suppliers` (`sid`, `sname`, `address`) VALUES ('10001',  
'Acme Widget', 'Bangalore');
```

```
INSERT INTO `supplier`.`suppliers` (`sid`, `sname`, `address`) VALUES ('10002',  
'Johns', 'Kolkata');
```

```
INSERT INTO `supplier`.`suppliers` (`sid`, `sname`, `address`) VALUES ('10003',  
'Vimal', 'Mumbai');
```

```
INSERT INTO `supplier`.`suppliers` (`sid`, `sname`, `address`) VALUES ('10004',  
'Reliance', 'Delhi');
```

	sid	sname	address
▶	10001	Acme Widget	Bangalore
	10002	Johns	Kolkata
	10003	Vimal	Mumbai
	10004	Reliance	Delhi
•	NULL	NULL	NULL

```
commit;
```

```
select* from SUPPLIERS;
```

```
create table PARTS(pid integer,pname varchar(20),color varchar(30),primary
key(pid));
```

```
INSERT INTO `supplier`.`parts` (`pid`, `pname`, `color`) VALUES ('20001', 'Book',
'Red');
```

```
INSERT INTO `supplier`.`parts` (`pid`, `pname`, `color`) VALUES ('20002', 'Pen',
'Red');
```

```
INSERT INTO `supplier`.`parts` (`pid`, `pname`, `color`) VALUES ('20003',
'Pencil', 'Green');
```

```
INSERT INTO `supplier`.`parts` (`pid`, `pname`, `color`) VALUES ('20004',
'Mobile', 'Green');
```

```
INSERT INTO `supplier`.`parts` (`pid`, `pname`, `color`) VALUES ('20005',
'Charger', 'Black');
```

```
commit;
```

```
select* from PART;
```

	pid	pname	color
▶	20001	Book	Red
	20002	Pen	Red
	20003	Pencil	Green
	20004	Mobile	Green
	20005	Charger	Black
●	NULL	NULL	NULL

```
create table CATALOG(sid integer,pid integer,foreign key(sid) references
SUPPLIERS(sid),foreign key(pid) references PARTS(pid),
```

```
cost integer,primary key(sid,pid));
```

```
INSERT INTO `supplier`.`catalog` (`sid`, `pid`, `cost`) VALUES ('10001', '20001',
'10');
```

```
INSERT INTO `supplier`.`catalog` (`sid`, `pid`, `cost`) VALUES ('10001', '20002',
'10');
```

```
INSERT INTO `supplier`.`catalog` (`sid`, `pid`, `cost`) VALUES ('10001', '20003',
'30');
```

```
INSERT INTO `supplier`.`catalog` (`sid`, `pid`, `cost`) VALUES ('10001', '20004',
'10');
```

```
INSERT INTO `supplier`.`catalog` (`sid`, `pid`, `cost`) VALUES ('10001', '20005', '10');
```

```
INSERT INTO `supplier`.`catalog` (`sid`, `pid`, `cost`) VALUES ('10002', '20001', '10');
```

```
INSERT INTO `supplier`.`catalog` (`sid`, `pid`, `cost`) VALUES ('10002', '20002', '20');
```

```
INSERT INTO `supplier`.`catalog` (`sid`, `pid`, `cost`) VALUES ('10003', '20003', '30');
```

```
INSERT INTO `supplier`.`catalog` (`sid`, `pid`, `cost`) VALUES ('10004', '20003', '40');
```

```
commit;
```

```
select* from CATALOG;
```

Additional Queries:

```
SELECT DISTINCT P.pname
```

```
FROM Parts P, Catalog C
```

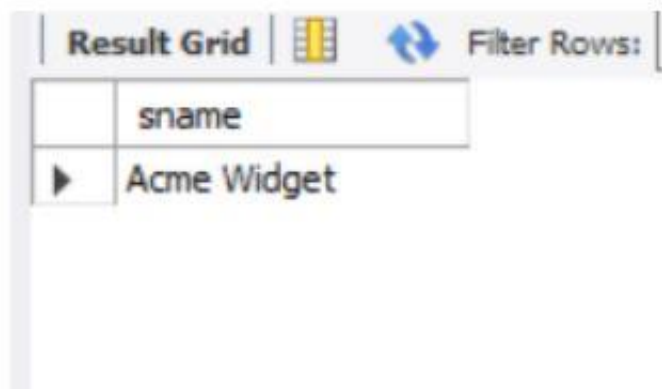
```
WHERE P.pid = C.pid;
```

	pname
▶	Book
	Pen
	Pencil
	Mobile
	Charger

```
select S.sname from SUPPLIERS S where not exists
```

(select P.pid from PARTS P where not exists

(select C.sid from CATALOG C where C.sid = S.sid and C.pid = P.pid));



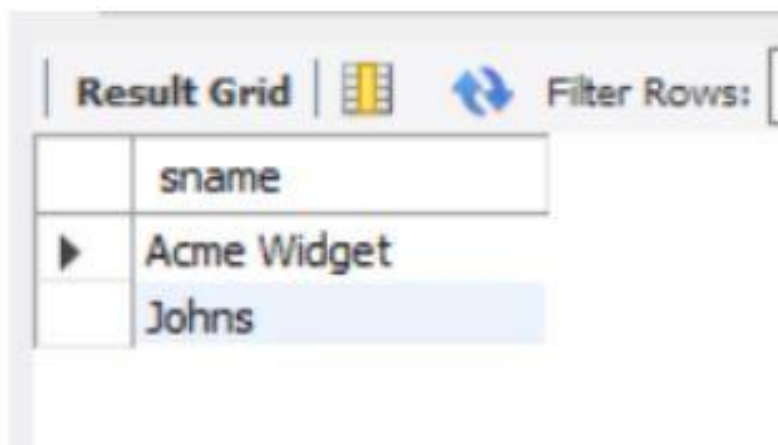
The screenshot shows a 'Result Grid' window with a toolbar containing icons for a grid, a refresh button, and a 'Filter Rows' dropdown. The grid has two columns: the first column contains a right-pointing triangle icon, and the second column contains the text 'Acme Widget'.

	sname
▶	Acme Widget

select S.sname from SUPPLIERS S where not exists

(select P.pid from PARTS P where P.color = 'Red' and

(not exists (select C.sid from CATALOG C where C.sid = S.sid and C.pid = P.pid))));



The screenshot shows a 'Result Grid' window with a toolbar containing icons for a grid, a refresh button, and a 'Filter Rows' dropdown. The grid has two columns: the first column contains a right-pointing triangle icon, and the second column contains the text 'Acme Widget' and 'Johns'.

	sname
▶	Acme Widget
	Johns

select P.pname from PARTS P, CATALOG C, SUPPLIERS S

where P.pid = C.pid and C.sid = S.sid and S.sname = 'Acme Widget'

and not exists (select * from CATALOG C1, SUPPLIERS S1

where P.pid = C1.pid and C1.sid = S1.sid and S1.sname <> 'Acme Widget');

Result Grid		Filter Rows:
	pname	
▶	Mobile	
	Charger	

```

SELECT DISTINCT C.sid FROM Catalog C
WHERE C.cost > ( SELECT AVG (C1.cost)
FROM Catalog C1
WHERE C1.pid = C.pid );

```

	sid
▶	10002
	10004

```

SELECT P.pid, S.sname
FROM Parts P, Suppliers S, Catalog C
WHERE C.pid = P.pid
AND C.sid = S.sid
AND C.cost = (SELECT MAX(C1.cost)
FROM Catalog C1
WHERE C1.pid = P.pid);

```

Result Grid			Filter Rows:	
	pid	sname		
▶	20001	Acme Widget		
	20004	Acme Widget		
	20005	Acme Widget		
	20001	Johns		
	20002	Johns		
	20003	Reliance		