

CODE:

```
create table supplier (sid int(5) primary key, sname varchar(20), city varchar(20));
```

```
create table parts (pid int(5) primary key, pname varchar(20), color varchar(10));
```

```
drop table parts;
```

```
create table catalog(
```

```
sid int(5),
```

```
pid int(5),
```

```
foreign key(sid) references supplier(sid),
```

```
foreign key(pid) references parts(pid),
```

```
cost float(6));
```

```
insert into supplier values('&sid', '&sname', '&city');
```

```
commit;
```

```
select * from suppliers;
```

```
insert into parts values('&pid', '&pname', '&color');
```

```
commit;
```

```
select * from parts;
```

```
insert into catalog values('&sid', '&pid', '&cost');
```

```
commit;
```

```
select * from catalog;
```

```
select distinct pname
```

```
from parts P, catalog C where P.pid = C.pid;
```

```
select sname from suppliers S
```

```
where not exists ((select P.pid from Parts P)
```

```
except (select C.pid from Catalog C where C.sid = S.sid));
```

```
select sname from suppliers S
```

```
WHERE NOT EXISTS (( select P.pid from Parts P
```

```
where P.colour = 'Red' )
```

```
except( select C.pid from Catalog C, Parts P
```

where C.sid = S.sid AND C.pid = P.pid AND P.colour = 'Red'));

select pname from parts where pid in(select pid from catalog
where sid=(select sid from suppliers where sname='acme widget')
except select pid from catalog where sid in(select sid from suppliers where
sname<>'acme widget')));

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

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);
```

TABLES:

Parts

	pid	pname	colour
▶	20001	Book	Red
	20002	Book	Red
	20003	Pencil	Green
	20004	Mobile	Green
	20005	Charger	Black

Suppliers

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

Catalog

	sid	pid	cost
▶	10001	20001	10
	10001	20002	10
	10001	20003	30
	10001	20004	10
	10001	20005	10

Result:

QUERY 1

	pname
▶	Book
	Pencil
	Mobile
	Charger

QUERY 2

	sname
▶	Acme Widget

QUERY 3

	sname
▶	Acme Widget
	Johns

QUERY 4

	pname
▶	Mobile
	Charger

QUERY 5

	sid
▶	10002
	10004

QUERY 6

	pname
▶	Book
	Pencil
	Mobile
	Charger