```sql
create database Supplier;
use Supplier;

create table Suppliers(
sid varchar(20) ,
sname varchar(20),
city varchar(20),
primary key(sid)
);
desc Suppliers;

create table Parts(
pid integer,
pname varchar(20),
color varchar(20),
primary key(pid)
);
desc Parts;

create table Catalog(
sid varchar(20),
pid integer,
cost real,
primary key(sid,pid),
foreign key(sid) references Suppliers(sid),
foreign key(pid) references Parts(pid)
);
desc Catalog;

insert into Suppliers values(10001,'Acme Widget','Bangalore');
insert into Suppliers values(10002,'Johns','Kolkata');
insert into Suppliers values(10003,'Vimal','Mumbai');
insert into Suppliers values(10004,'Reliance','Delhi');
insert into Suppliers values(10005, 'Mahindra','Mumbai');
select *from Suppliers;

insert into Parts values(20001,'Book','Red');
insert into Parts values(20002,'Pen','Red');
insert into Parts values(20003,'Pencil','green');
insert into Parts values(20004,'Mobile','green');
insert into Parts values(20005,'Charger','Black');
select *from Parts;
```

```
insert into Catalog values(10001,20001,10);
insert into Catalog values(10001,20002,10);
insert into Catalog values(10001,20003,30);
insert into Catalog values(10001,20004,10);
insert into Catalog values(10001,20005,10);
insert into Catalog values(10002,20001,10);
insert into Catalog values(10002,20002,20);
insert into Catalog values(10003,20003,30);
insert into Catalog values(10004,20003,40);
select *from Catalog;

select distinct P.pname from Parts P, Catalog c where P.pid=C.pid;

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));

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)));

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');

select distinct c.sid from Catalog  c where c.cost >(select avg(ca.cost) from Catalog ca where
ca.pid=c.pid);


select s.sname ,p.pid from Suppliers s, Catalog c, Parts p where s.sid=c.sid and c.pid =p.pid and
c.cost=(select max(ca.cost) from catalog ca where ca.pid=p.pid);
```

OUTPUTS:

```
33 •    insert into Suppliers values(10004,'Reliance','Delhi');
34 •    insert into Suppliers values(10005, 'Mahindra','Mumbai');
35 •    select *from Suppliers;
36
37 •    insert into Parts values(20001,'Book','Red');
38 •    insert into Parts values(20002,'Pen','Red');
39 •    insert into Parts values(20003,'Pencil','green');
40 •    insert into Parts values(20004,'Mobile','green');
41 •    insert into Parts values(20005,'Charger','Black');
42 •    select *from Parts;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: TA

sid	sname	city
10001	Acme Widget	Bangalore
10002	Johns	Kolkata
10003	Vimal	Mumbai
10004	Reliance	Delhi
10005	Mahindra	Mumbai
NULL	NULL	NULL

uppliers 15 ×

```
37 •    insert into Parts values(20001,'Book','Red');
38 •    insert into Parts values(20002,'Pen','Red');
39 •    insert into Parts values(20003,'Pencil','green');
40 •    insert into Parts values(20004,'Mobile','green');
41 •    insert into Parts values(20005,'Charger','Black');
42 •    select *from Parts;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: TA

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

Parts 16 ×

SWETHA PATIL ×

File   Edit   View   Query   Database   Server   Tools   Scripting   Help

insurance   bank*   SQL File 6*   SQL File 7* ×

Limit to 1000 rows

```
45 •   insert into Catalog values(10001,20002,10);
46 •   insert into Catalog values(10001,20003,30);
47 •   insert into Catalog values(10001,20004,10);
48 •   insert into Catalog values(10001,20005,10);
49 •   insert into Catalog values(10002,20001,10);
50 •   insert into Catalog values(10002,20002,20);
51 •   insert into Catalog values(10003,20003,30);
52 •   insert into Catalog values(10004,20003,40);
53 •   select *from Catalog;
54
55 •   select distinct P.pname from Parts P, Catalog c where P.pid=C.pid;
56
57 •   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));
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

sid	pid	cost
10001	20001	10
10001	20002	10
10001	20003	30
10001	20004	10
10001	20005	10
10002	20001	10
10002	20002	20
10003	20003	30
10004	20003	40
NULL	NULL	NULL

Catalog 17 ×

Result Grid | Form Editor | Field Types

```
54
55 •   select distinct P.pname from Parts P, Catalog c where P.pid=C.pid;
56
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

pname
Book
Pen
Pencil
Mobile
Charger

```
56
57 •   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));
58
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

sname
Acme Widget

Result Grid | Form Editor

```
58
59 ● 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)
60
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: A

sname
Acme Widget
Johns

```
60
61 ● = 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');
62
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: A

pname
Mobile
Charger

```
62
63 ● select distinct c.sid from Catalog  c where c.cost >(select avg(ca.cost) from Catalog ca where ca.pid=c.pid);
64
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: A

sid
10002
10004

```
65

66 ● select s.sname ,p.pid from Suppliers s, Catalog c, Parts p where s.sid=c.sid and c.pid =p.pid and c.cost=(select max(ca.cost) from catalog ca where ca.pid=p.pid);
```

Result Grid | Filter Rows: [   ]   Export: | Wrap Cell Content: 𝐈A

sname	pid
Acme Widget	20001
Johns	20001
Johns	20002
Reliance	20003
Acme Widget	20004
Acme Widget	20005

Result Grid

Form Editor

Field Types

Result 23 ✕   ⓘ Read Only