LAB3 BANK

create database supplier;

use supplier;

create table suppliers(

  sid int primary key,

 sname varchar(30),

 address varchar(30)

);

create table parts(

  pid int primary key,

 pname varchar(30),

 color varchar(30)

);

create table catalog (

  sid int ,

 pid int ,

 cost real,

 constraint c_sid foreign key(sid) references suppliers(sid) ,

 constraint c_pid foreign key(pid) references parts(pid)

);

insert into suppliers values(1,'Acme Widget','kolkata') ;

insert into suppliers values(2,'Tata','bengaluru') ;

insert into suppliers values(3,'Reebok','delhi') ;

insert into suppliers values(4,'Nike','delhi') ;

```sql
insert into suppliers values(5,'Reliance','delhi') ;


insert into parts values(1,'paint','red') ;

insert into parts values(2,'steel','black') ;

insert into parts values(3,'spray','red') ;

insert into parts values(4,'sheet','green');

insert into parts values(5,'tiles','blue');

delete from parts where pid=5;


insert into catalog values(1,1,100);

insert into catalog values(1,2,200);

insert into catalog values(1,3,200);

insert into catalog values(1,4,100);

insert into catalog values(2,1,300);

insert into catalog values(2,2,100);

insert into catalog values(3,2,90);

insert into catalog values(3,3,110);

insert into catalog values(3,4,110);

insert into catalog values(4,1,100);

insert into catalog values(4,3,120);

insert into catalog values(4,4,130);


select * from catalog;

select * from parts;
```

```sql
insert into parts values(5,'tiles','blue');

select p.pname from parts p where p.pid in (select pid from catalog c group by
c.pid having count(c.sid)>0);

insert into catalog values(1,5,140);

select p.pname from parts p where p.pid in (select pid from catalog c group by
c.pid having count(c.sid)>0);

delete from catalog where pid=5;

delete from parts where pid=5;

select s.sname from suppliers s where s.sid in (select c.sid from catalog c group
by c.sid having count(distinct (c.pid))=(select count(p.pid) from parts p));


select s.sname from suppliers s where s.sid in (select ca.sid  from catalog
ca,parts p where ca.pid=p.pid and p.color='red' group by ca.sid having
count(ca.pid)=(select count(*) from parts p where p.color='red'));


select ca.pid from catalog ca  where ca.sid=(select s.sid from suppliers s where
s.sname ='Acme Widget') having (select count(c.pid) from catalog c where
c.pid=ca.pid)=1;


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


select s.sname from suppliers s where s.sid in (select c.sid from catalog c
where c.cost=(select max(cost) from catalog ca where ca.pid=c.pid));


select s.sname from suppliers s where s.sid in(select c.sid from catalog c where
c.sid not in (select distinct(ca.sid) from catalog ca,parts p where ca.pid=p.pid
and p.color!='red'));

insert into catalog values(5,1,140);
```

select s.sname from suppliers s where s.sid in(select c.sid from catalog c where c.sid not in (select distinct(ca.sid) from catalog ca,parts p where ca.pid=p.pid and p.color!='red'));

delete from catalog where sid=5;

OUTPUT

```
$sqlite3 database.sdb < main.sql
1|Acme Widget|kolkata
2|Tata|bengaluru
3|Reebok|delhi
4|Nike|delhi
5|Reliance|delhi
1|1|100.0
1|2|200.0
1|3|200.0
1|4|100.0
2|1|300.0
2|2|100.0
3|2|90.0
3|3|110.0
3|4|110.0
4|1|100.0
4|3|120.0
4|4|130.0
```

QUERIES

```
1|paint|red
2|steel|black
3|spray|red
4|sheet|green
paint
steel
spray
sheet
paint
steel
spray
sheet
tiles
Acme Widget
Acme Widget
Nike
1|2
1|3
2|1
4|4
Acme Widget
Tata
Nike
Reliance
```