SUPPLIER DATABASE

```
create database supplier_062;
use supplier_062;
create table supplier(
s_id varchar(20),
s_name varchar(20),
city varchar(20),
primary key(s_id)
);
 create table parts(
p_id varchar(20),
p_name varchar(20),
color varchar(20),
primary key(p_id)
);
create table clog(
s_id varchar(20),
p_id varchar(20),
cost varchar(20),
primary key(s_id,p_id),
foreign key(p_id)references parts(p_id),
foreign key(s_id)references supplier(s_id)
);
insert into supplier values(10001,'acme widget','bangalore');
insert into supplier values(10002,'johns','kolkata');
insert into supplier values(10003,'vimal','mumbai');
insert into supplier values(10004,'reliance','delhi');

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');
```

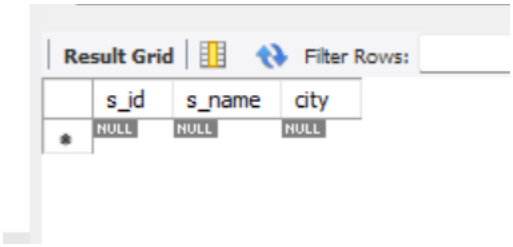
```
insert into parts values(20005,'charger','black');


insert into clog values(10001,20001,10);

insert into clog values(10001,20002,10);

insert into clog values(10001,20003,30);

insert into clog values(10001,20004,10);

insert into clog values(10001,20005,10);

insert into clog values(10002,20001,10);

insert into clog values(10002,20002,20);

insert into clog values(10003,20003,30);

insert into clog values(10004,20003,40);

select p_name from parts where p_id IN (select p_id from clog);

select s_name from supplier where s_id in(select s_id from clog  group by s_id having
count(p_id)=(select count(p_id) from parts));

select s_name from supplier where s_id in (select s_id from clog where p_id in(select p_id from parts
where color='red'));

select p_name from parts where p_id not in

(select a.p_id from clog a,clog b where a.p_id=b.p_id and a.s_id!=b.s_id);

select a.a.s_id from clog a where cost>(select avg(b.cost) from clog b where b.p_id=a.p_id group by
b.p_id);

select  s.s_name from supplier s,clog a where s.s_id=a.s_id and a.cost=

(select max(cost) from clog where a.p_id=p_id group by p_id);
```

Week-7-QUERIES

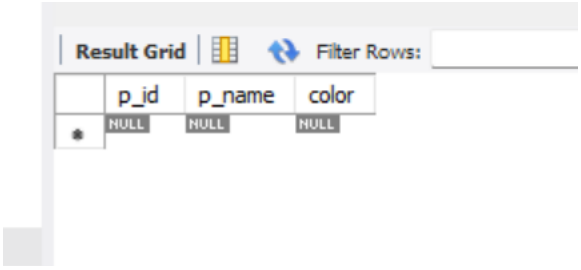
1. **Using Scheme diagram, Create tables by properly specifying the primary keys and the foreign keys.**

SQL>

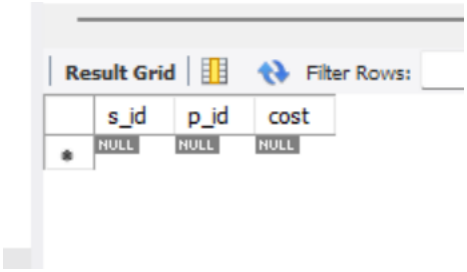
```
create table supplier(
s_id varchar(20),
s_name varchar(20),
city varchar(20),
primary key(s_id)
);
```




```
create table parts(
 p_id varchar(20),
p_name varchar(20),
color varchar(20),
primary key(p_id)
);
```



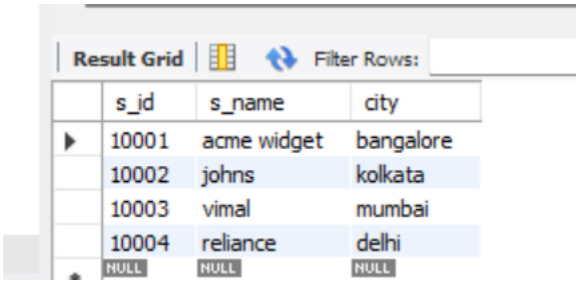

```
create table clog(
s_id varchar(20),
p_id varchar(20),
cost varchar(20),
primary key(s_id,p_id),
foreign key(p_id)references parts(p_id),
foreign key(s_id)references supplier(s_id)
);
```



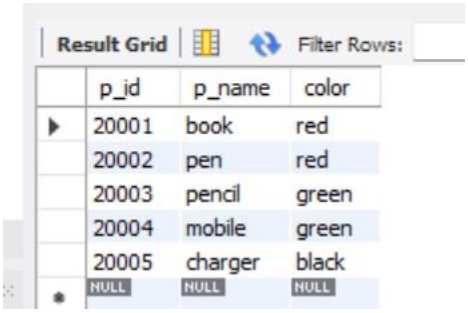
2.Insert appropriate records in each table.

SQL>

```
insert into supplier values(10001,'acme widget','bangalore');
insert into supplier values(10002,'johns','kolkata');
insert into supplier values(10003,'vimal','mumbai');
insert into supplier values(10004,'reliance','delhi');
```




```
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');
```



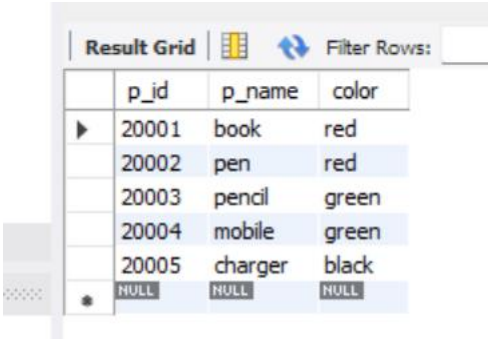

```
insert into clog values(10001,20001,10);
insert into clog values(10001,20002,10);
insert into clog values(10001,20003,30);
insert into clog values(10001,20004,10);
insert into clog values(10001,20005,10);
```

insert into clog values(10002,20001,10);

insert into clog values(10002,20002,20);

insert into clog values(10003,20003,30);

insert into clog values(10004,20003,40);



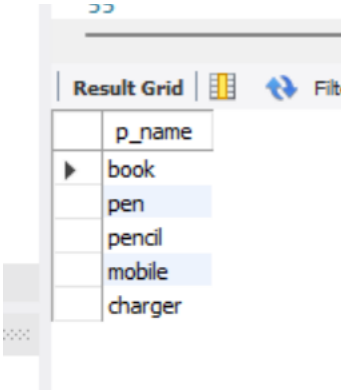
Result Grid | Filter Rows:

p_id	p_name	color
20001	book	red
20002	pen	red
20003	pencil	green
20004	mobile	green
20005	charger	black
NULL	NULL	NULL

3.Find the pnames of parts for which there is some supplier.

SQL>

select p_name from parts where p_id IN (select p_id from clog);



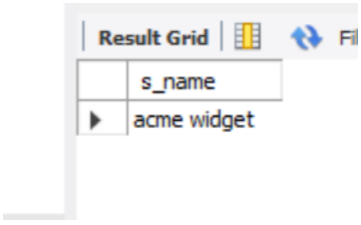
Result Grid | Filt

p_name
book
pen
pencil
mobile
charger

4. Find the snames of suppliers who supply every part.

SQL>

select s_name from supplier where s_id in(select s_id from clog group by s_id having count(p_id)=(select count(p_id) from parts));



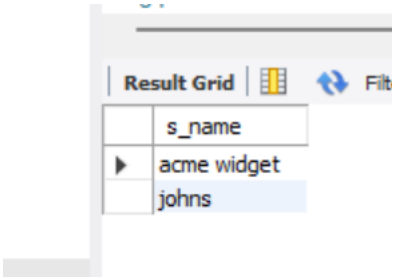
Result Grid | Fi

s_name
acme widget

5. Find the snames of suppliers who supply every red part.

SQL>

select s_name from supplier where s_id in (select s_id from clog where p_id in(select p_id from parts where color='red'));

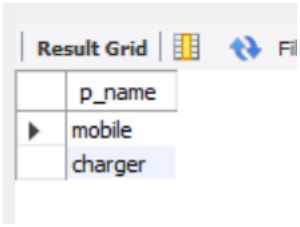


6. Find the pnames of parts supplied by Acme Widget Suppliers and by no one else.

SQL>

select p_name from parts where p_id not in

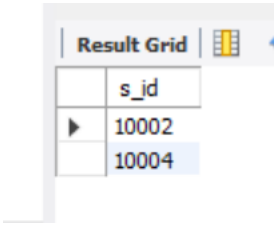
(select a.p_id from clog a,clog b where a.p_id=b.p_id and a.s_id!=b.s_id);



7. Find the sids of suppliers who charge more for some part than the average cost of that part (averaged over all the suppliers who supply that part).

SQL>

select a.a.s_id from clog a where cost>(select avg(b.cost) from clog b where b.p_id=a.p_id group by b.p_id);



8. For each part, find the sname of the supplier who charges the most for that part.

SQL>

select s.s_name from supplier s,clog a where s.s_id=a.s_id and a.cost=

(select max(cost) from clog where a.p_id=p_id group by p_id);