WEEK 7

VIBHA HUGAR CS255

insert into parts values

QUERY 1

Using Scheme diagram, create tables by properly specifying the primary keys and the foreign keys.

```
create database supplier;
use supplier;
create table supplier
(sid int, sname varchar(50), city varchar(50),
primary key(sid));
create table parts
(pid int, pname varchar(50), colour varchar(50),
primary key(pid));
create table catalog
(sid int, pid int, cost int,
foreign key(sid) references supplier(sid),
foreign key(pid) references parts(pid) on delete cascade);
QUERY 2
Insert appropriate records in each table.
insert into supplier values
(10001, 'acmewidget', 'bangalore'), (10002, 'johns', 'kolkata'), (10003, 'vimal', 'mumbai'), (10004, 'reliance'
,'delhi');
```

```
(20001,'book','red'),(20002,'pen','red'),(20003,'pencil','green'),
(20004,'mobile','green'),(20005,'charger','black');
```

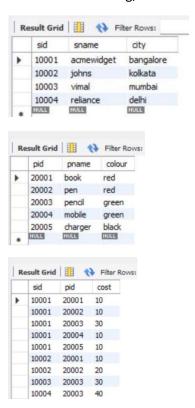
insert into catalog values

(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);

select * from supplier;

select * from parts;

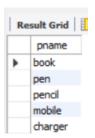
select * from catalog;



QUERY 3

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

select pname from parts where pid in (select pid from catalog);



QUERY 4

Find the snames of suppliers who supply every part.

select sname from

(select c.sname,count(distinct a.pid) as cnt from catalog a

left join parts b on a.pid=b.pid

left join supplier c on c.sid=a.sid group by 1) a

where cnt=(select count(distinct a.pid) from catalog a

left join parts b on a.pid=b.pid);



QUERY 5

Find the snames of suppliers who supply every red part.

select sname from supplier

where sid in(select sid from catalog where pid in(select pid from

parts where colour='red'));



QUERY 6

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

select pname from parts where pid in(
select pid from catalog where sid in(select sid from supplier where
sname='acmewidget'))
and pid not in(select pid from catalog where sid in(select sid from
supplier where
sname!='acmewidget'));

Result Grid
pname

QUERY 7

mobile charger

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).

select c.sid from catalog c
where c.cost >(select avg(cc.cost) from catalog cc where c.pid=cc.pid
group by cc.pid);



QUERY 8

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

select sname from supplier
where sid in(select sid from catalog where cost in(select max(cost)
from catalog group by pid));

