

WEEK 7

```
create database supplier;  
use supplier;
```

```
create table suppliers(  
s_id int primary key,  
s_name varchar(30),  
city varchar(30)  
);
```

```
create table parts(  
p_id int primary key,  
p_name varchar(30),  
color varchar(30)  
);
```

```
create table catalog(  
s_id int,  
p_id int,  
cost int,  
foreign key (s_id) references suppliers(s_id),  
foreign key (p_id) references parts(p_id)  
);
```

```
insert into suppliers values (10001,'Acme widget','Bengaluru');  
insert into suppliers values (10002,'Johns','Kolkata');  
insert into suppliers values (10003,'Vimal','Mumbai');  
insert into suppliers 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 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);

/*3*/

select p_name from parts where p_id in
(select distinct p_id from catalog);

	p_name
▶	Book
	Pen
	Pencil
	Mobile
	Charger

/*4*/

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

	s_name
▶	Acme widget

/*5*/

select s_name from suppliers where s_id in
(select s_id from catalog where p_id in
(select p_id from parts where color='red'));

	s_name
▶	Acme widget
	Johns

/*6*/

select p_name from parts where p_id not in
(select a.p_id from catalog a,catalog b where a.p_id=b.p_id and a.s_id!=b.s_id);

	p_name
▶	Mobile
	Charger

/*7*/

select a.s_id from catalog a where cost>

(select avg(b.cost) from catalog b where b.p_id=a.p_id group by b.p_id);

	s_id
▶	10002
	10004

/*8*/

select s.s_name from suppliers s,catalog a where s.s_id=a.s_id and a.cost=

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

	s_name
▶	Acme widget
	Acme widget
	Acme widget
	Johns
	Johns
	Reliance