

DBMS LAB-3

→ Query 1

```
create database Suppliers;  
use Suppliers;
```

```
create table Supplier(  
sid int,  
sname char(30),  
city char(30));
```

```
create table catalog(  
sid int,  
pid int,  
cost int);
```

```
create table parts(  
pid int,  
pname varchar(30),  
color varchar(30),  
primary key (pid));
```

→ Query 2

```
use Suppliers;
```

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

```
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;
```

→ Query 3

use Suppliers;

```
select distinct p.pname  
from parts p, catalog c  
where p.pid = c.pid;
```

→ Query 4

use Suppliers;

```
select s.name 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));
```

→ Query 5

use Suppliers;

```
select s.name 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));
```


→ Query 6
use Suppliers;

```
select p.name 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, supplier s1
where p.pid = c1.pid
and c1.sid = s1.sid
and s1.name <> 'Acme Widget');
```

→ Query 7
use Suppliers;

```
select distinct c.sid from catalog c
where c.cost > (select avg (c1.cost))
from catalog c1
where c1.pid = c.pid);
```

→ Query 8
use Suppliers;

```
select p.pid, s.sname
from parts p, suppliers s, catalog c
where c.pid = p.pid
and c.sid = s.sid
and c.cost = (
select MAX (c1.cost)
from catalog c1
where c1.pid = p.pid);
```