

**B.M.S COLLEGE OF ENGINEERING BENGALURU**  
Autonomous Institute, Affiliated To VTU

Bachelor of Engineering  
in  
Computer Science and Engineering

Submitted by:  
**SUMAN KUMAR PAL**  
USN Number: - 1BM18CS111

Lab : DBMS

Faculty in-charge : Panimozhi K

Lab in-charge : Pallavi Gb

## **LAB 3**

### **CODE:**

```
create table supplier (sid number(5) primary key, sname varchar(20), city varchar(20));
create table parts (pid number(5) primary key, pname varchar(20), color varchar(10));
drop table parts;
create table catalog(
sid number(5),
pid number(5),
foreign key(sid) references supplier(sid),
foreign key(pid) references parts(pid),
cost float(6));
```

```
insert into supplier values('&sid', '&sname', '&city');
commit;
select * from supplier;
```

```
insert into parts values('&pid', '&pname', '&color');
commit;
select * from parts;
```

```
insert into catalog values('&sid', '&pid', '&cost');
commit;
select * from catalog;
```

```
select distinct pname
from parts P, catalog C where P.pid = C.pid;
```

```
select sname from supplier S
where not exists ((select P.pid from Parts P)
minus (select C.pid from Catalog C where C.sid = S.sid));
```

```
select sname from Supplier S
WHERE NOT EXISTS (( select P.pid from Parts P
where P.color = 'Red' )
minus( select C.pid from Catalog C, Parts P
where C.sid = S.sid AND C.pid = P.pid AND P.color = 'Red' ));
```

```
select pname from parts where pid in(select pid from catalog
where sid=(select sid from supplier where sname='acme widget')
minus select pid from catalog where sid in(select sid from supplier where
sname<>'acme widget'));
```

```
SELECT DISTINCT C.sid FROM Catalog C WHERE C.cost > ( SELECT AVG (C1.cost)
FROM Catalog C1 WHERE C1.pid = C.pid );
```

```
SELECT P.pid, S.sname
```

FROM Parts P, Supplier 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);

## OUTPUT:

Supplier table:

	SID	SNAME	CITY
1	1	john	kolkata
2	2	acme widget	bangalore
3	3	reliance	mumbai
4	4	vimal	delhi

Parts table:

	PID	PNAME	COLOR
1	2001	book	red
2	2002	pen	black
3	2003	pencil	red
4	2004	mobile	white
5	2005	folder	red

Catalog table:

	SID	PID	COST
2	1	2002	10
3	1	2003	30
4	1	2004	30
5	1	2005	10
6	2	2001	20
7	2	2002	30
8	3	2001	10
9	4	2002	10
10	2	2005	20

QUERY 1:

	PNAME
1	pen
2	book
3	pencil
4	mobile
5	folder

QUERY 2:

	SNAME
1	john

QUERY 3:

	SNAME
1	john
2	acme widget
3	reliance
4	vimal

QUERY 4:

	PNAME
1	folder

QUERY 5:

	SID
1	2

QUERY 6:

	PID	SNAME
1	2002	acme widget
2	2001	acme widget
3	2003	john
4	2004	john
5	2005	acme widget