

LAB - 3 : SUPPLIERS DATABASE

Queries :

● 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 suppliers values(10001, 'Arma 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 suppliers values(10005, 'Mahindra', 'Mumbai');  
select * from suppliers;
```

```
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
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,
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.pname from parts p, catalog c, suppliers s
where p.pid = c.pid
and c.pid c.sid = s.sid and s.sname = 'Acme Widget'
and not exists (
select * from catalog c1, suppliers s1
where p.pid = c1.pid
and c1.sid = s1.sid
and s1.sname <> '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);

```