

SUPPLIER DATABASE

TEJAS BHARADWAJ

DBMS LAB 6

```
create database supplier;
```

```
use supplier;
```

```
create table supplier(sid int primary key, sname varchar(50), address varchar(100));
```

```
create table parts(pid int primary key, pname varchar(50), colour varchar(100));
```

```
create table catalog(sid int, pid int, cost decimal(10,2), primary key(sid,pid),foreign key(sid)
references supplier(sid),foreign key(pid) references parts(pid));
```

```
insert into supplier values
```

```
(1,"Aone widget suppliers","Bangalore"),
```

```
(2,"Global industries","Chennai"),
```

```
(3,"National parts co","Delhi"),
```

```
(4,"Relaible supplies","Mumbai");
```

```
insert into parts values
```

```
(101,"Bolt","Red"),
```

```
(102,"Nut","Green"),
```

```
(103,"Screw","Red"),
```

```
(104,"Washer","Blue"),
```

```
(105,"Log","Red");
```

```
insert into catalog values
```

```
(1,101,12.50),
```

```
(1,103,10.00),
```

```
(2,101,11.00),
```

```
(2,104,9.50),
```

```
(3,102,7.75),
```

```
(3,105,15.00),
```

```
(4,103,8.00),
```

```
(4,104,9.75);
```

Queries

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

```
select p.pname
```

```
from parts p, supplier s, catalog c
```

```
where p.pid=c.pid and s.sid=c.sid
```

```
group by p.pname;
```

| pname |
|--------|
| Bolt |
| Screw |
| Washer |
| Nut |
| Log |

-- Find the snames of suppliers who supply every part.

```
select s.sname
```

```
from supplier s, catalog c
```

```
where s.sid=c.sid
```

```
group by s.sid
```

```
having count(distinct c.pid)=(select count(pid) from catalog);
```

| sname |
|-------|
|-------|

-- Find the snames of suppliers who supply every red part.

```
select s.sname
```

```
from supplier s, catalog c, parts p
```

```
where s.sid=c.sid and p.pid=c.pid and p.colour="Red"
```

```
group by s.sname;
```

| sname |
|-----------------------|
| Aone widget suppliers |
| Global industries |
| Relaible supplies |
| National parts co |

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

select p.pname

from parts p, catalog c, supplier s

where p.pid=c.pid and c.sid=s.sid and s.sname="Aone widget suppliers";

| pname |
|-------|
| Bolt |
| Screw |

-- 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 s.sid

from supplier s, parts p, catalog c

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

| sid |
|-----|
| 1 |
| 1 |
| 4 |

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

select s.sname, p.pname

from supplier s,catalog c, parts p

where s.sid=c.sid and c.pid=p.pid and c.cost=(select max(c.cost) from catalog c where c.pid=p.pid group by c.pid);

| sname |
|-----------------------|
| Aone widget suppliers |
| Aone widget suppliers |
| National parts co |
| National parts co |
| Relaible supplies |