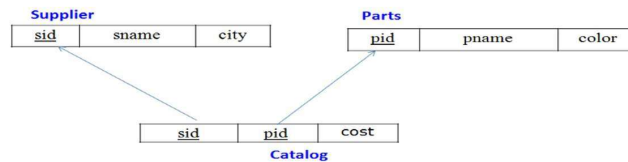


7. Supplier Database

PROGRAM 7: Supplier Database



- i. Using Scheme diagram, create tables by properly specifying the primary keys and the foreign keys.
- ii. Insert appropriate records in each table.
- iii. Find the pnames of parts for which there is some supplier. iv. Find the snames of suppliers who supply every part.
- v. Find the snames of suppliers who supply every red part.
- vi. Find the pnames of parts supplied by Acme Widget Suppliers and by no one else. vii. 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).
- viii. For each part, find the sname of the supplier who charges the most for that part.

Creating database and table:

```
create database supplier_244;
use supplier_244;
```

```
create table Supplier
(
    sid int primary key,
    sname varchar(35),
    city varchar(35));
```

```
create table parts
(
    pid int primary key,
    pname varchar(35),
    color varchar(35));
```

```
create table catalog
(
    sid int,
    pid int,
    cost float,
    primary key(sid,pid),
    foreign key(sid) references
    Supplier(sid),
    foreign key(pid) referencesparts(pid));
```

Inserting values to tables:

iii. 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).

create view c as select c.pid,p.pname,avg(cost) as co from catalog c,parts p where c.pid=p.pid group by c.pid; select ca.sid from catalog ca,c where ca.pid=c.pid and ca.cost>c.co and c.pid=ca.pid;

sid
10002
10004

iv. For each part, find the sname of the supplier who charges the most for that part.
select sname,co.pid,pname,cost from Supplier s,parts po,catalog co where co.pid=po.pid and s.sid=co.sid and co.cost = (select max(cost) from catalog where pid=po.pid) ;

sname	pid	pname	cost
Acme Widget	20001	Book	10
Acme Widget	20004	Mobile	10
Acme Widget	20005	Charger	10
Johns	20001	Book	10
Johns	20002	Pen	20
Reliance	20003	Pencil	40