|  |
| --- |
| CREATE DATABASE SUPPLIER; |
|  | USE SUPPLIER; |
|  |  |
|  | CREATE TABLE SUPPLIERS(SID INT,SNAME VARCHAR(10),ADDRESS VARCHAR(10),PRIMARY KEY(SID)); |
|  |  |
|  | CREATE TABLE PARTS(PID INT,PNAME VARCHAR(10),COLOR VARCHAR(10),PRIMARY KEY(PID)); |
|  |  |
|  | CREATE TABLE CATALOG(SID INT,PID INT,COST REAL,PRIMARY KEY(SID,PID),FOREIGN KEY(SID) REFERENCES SUPPLIERS(SID),FOREIGN KEY(PID) REFERENCES PARTS(PID)); |
|  |  |
|  | INSERT INTO SUPPLIERS VALUES(10,'ACMEWIDGET','BLORE'); |
|  | INSERT INTO SUPPLIERS VALUES(20,'JONES','DELHI'); |
|  | INSERT INTO SUPPLIERS VALUES(30,'VIMAL','PUNE'); |
|  | INSERT INTO SUPPLIERS VALUES(40,'RELIANCE','MUMBAI'); |
|  | INSERT INTO SUPPLIERS VALUES(50,'PARCEL','KOLKATA'); |
|  | SELECT \* FROM SUPPLIERS; |
|  |  |
|  | INSERT INTO PARTS VALUES(100,'BOOK','RED'); |
|  | INSERT INTO PARTS VALUES(200,'PEN','RED'); |
|  | INSERT INTO PARTS VALUES(300,'PENCIL','GREEN'); |
|  | INSERT INTO PARTS VALUES(400,'MOBILE','GREEN'); |
|  | INSERT INTO PARTS VALUES(500,'CHARGER','BLACK'); |
|  | INSERT INTO PARTS VALUES(600,'ERASER','WHITE'); |
|  | SELECT \* FROM PARTS; |
|  |  |
|  | INSERT INTO CATALOG VALUES(10,100,300); |
|  | INSERT INTO CATALOG VALUES(10,200,100); |
|  | INSERT INTO CATALOG VALUES(10,300,50); |
|  | INSERT INTO CATALOG VALUES(10,400,10); |
|  | INSERT INTO CATALOG VALUES(10,500,400); |
|  | INSERT INTO CATALOG VALUES(10,600,40); |
|  | INSERT INTO CATALOG VALUES(20,100,100); |
|  | INSERT INTO CATALOG VALUES(30,200,150); |
|  | INSERT INTO CATALOG VALUES(40,300,200); |
|  | INSERT INTO CATALOG VALUES(50,400,70); |
|  | INSERT INTO CATALOG VALUES(20,500,100); |
|  | INSERT INTO CATALOG VALUES(20,200,500); |
|  | SELECT \* FROM CATALOG; |
|  |  |
|  | /\*Find the pnames of parts for which there is some supplier.\*/ |
|  | SELECT DISTINCT P.PNAME FROM PARTS P,CATALOG C WHERE P.PID=C.PID; |
|  |  |
|  | /\*Find the snames of suppliers who supply every part.\*/ |
|  | SELECT S.SNAME FROM SUPPLIERS S WHERE NOT EXISTS (SELECT P.PID FROM PARTS P WHERE P.PID NOT IN (SELECT C.PID FROM CATALOG C WHERE C.SID=S.SID)); |
|  |  |
|  | /\*Find the snames of suppliers who supply every red part.\*/ |
|  | SELECT S.SNAME FROM SUPPLIERS S WHERE NOT EXISTS (SELECT P.PID FROM PARTS P WHERE P.PID NOT IN (SELECT C.PID FROM CATALOG C WHERE C.SID=S.SID) AND P.COLOR="RED"); |
|  |  |
|  | /\*Find the pnames of parts supplied by Acme Widget Suppliers and by no one else\*/ |
|  | SELECT P.PNAME FROM PARTS P,SUPPLIERS S,CATALOG C WHERE P.PID=C.PID AND C.SID=S.SID AND P.PNAME NOT IN (SELECT DISTINCT P.PNAME FROM PARTS P,CATALOG C,SUPPLIERS S WHERE P.PID=C.PID AND C.SID=S.SID AND S.SNAME!='ACMEWIDGET'); |
|  |  |
|  | /\*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 C1.SID,C1.PID,C1.COST FROM CATALOG C1 WHERE C1.COST>(SELECT AVG(C.COST) FROM CATALOG C WHERE C.PID=C1.PID GROUP BY C.PID); |
|  |  |
|  | /\*For each part, find the sname of the supplier who charges the most for that part.\*/ |
|  | SELECT S.SNAME,C.PID FROM CATALOG C,SUPPLIERS S,PARTS P WHERE S.SID=C.SID AND P.PID=C.PID AND C.COST=(SELECT MAX(C1.COST) FROM CATALOG C1 WHERE C1.PID=C.PID GROUP BY C1.PID); |