19PW15 DBMS WS5

EDITOR USED: POPSQL

DBMS USED : MYSQL

USE 19pw;

CREATE TABLE 19PW15SUPPLIER

(

SNR VARCHAR(4) CHECK (SNR REGEXP 'S[0-9]{3}' ),

SNAME VARCHAR(50) UNIQUE,

DATEOFBUSINESS DATE,

CITY VARCHAR(50) CHECK ( CITY REGEXP ('^[A-Z]')),

CONSTRAINT S1 PRIMARY KEY (SNR)

);

CREATE TABLE 19PW15ARTICLE

(

ANR VARCHAR(4) CHECK (ANR REGEXP 'A[0-9]{2}' ),

ANAME VARCHAR(50) UNIQUE,

COLOR VARCHAR(10),

WEIGHT INT,

CITY VARCHAR(50),

CONSTRAINT A1 PRIMARY KEY (ANR),

CONSTRAINT A2 CHECK (COLOR IN ('WHITE', 'BLACK', 'RED'))

);

CREATE TABLE 19PW15DELIVERY

(

SNR VARCHAR(4),

ANR VARCHAR(4),

QTY INT,

CONSTRAINT D1 FOREIGN KEY (ANR) REFERENCES 19PW15ARTICLE (ANR),

CONSTRAINT D2 FOREIGN KEY (SNR) REFERENCES 19PW15SUPPLIER (SNR),

CONSTRAINT D3 PRIMARY KEY (SNR, ANR)

);

INSERT INTO 19PW15SUPPLIER

VALUES ('S001', 'KENSTAR', STR\_TO\_DATE('01/01/2002', '%d/%m/%Y'), 'Chennai'),

('S002', 'SAMSUNG', STR\_TO\_DATE('12/10/2001', '%d/%m/%Y'), 'Cbe'),

('S003', 'ELGI', STR\_TO\_DATE('20/02/1999', '%d/%m/%Y'), 'Cbe'),

('S004', 'PHILIPS', STR\_TO\_DATE('10/12/1999', '%d/%m/%Y'), 'Delhi');

INSERT INTO 19PW15ARTICLE

VALUES ('A01', 'MOBILE', 'BLACK', 100, 'Cbe'),

('A02', 'MICROWAVE', 'WHITE', 1500, 'Bombay'),

('A03', 'AIR COOLER', 'WHITE', 2000, 'Cbe'),

('A04', 'REFRIGIRATOR', 'RED', 10000, 'Delhi');

INSERT INTO 19PW15DELIVERY

VALUES ('S003', 'A01', 1000),

('S002', 'A02', 200),

('S003', 'A02', 500),

('S004', 'A03', 10),

('S002', 'A04', 50),

('S003', 'A03', 25),

('S001', 'A02', 55),

('S001', 'A03', 200),

('S001', 'A04', 78),

('S001', 'A01', 67);

SELECT SNR,ANR FROM 19PW15DELIVERY GROUP BY SNR HAVING COUNT(\*)=2;

SELECT A.ANR,D.QTY FROM 19PW15ARTICLE A INNER JOIN 19PW15DELIVERY D ON A.ANR = D.ANR ORDER BY A.CITY DESC LIMIT 1;

SELECT S.SNAME FROM 19PW15SUPPLIER S INNER JOIN 19PW15DELIVERY D ON S.SNR = D.SNR INNER JOIN 19PW15ARTICLE A ON D.ANR = A.ANR WHERE A.COLOR = 'RED';

SELECT A.ANR FROM 19PW15ARTICLE A INNER JOIN 19PW15DELIVERY D ON A.ANR = D.ANR INNER JOIN 19PW15SUPPLIER S ON D.SNR = S.SNR WHERE S.CITY = 'Cbe' AND A.CITY = 'Cbe';

ALTER TABLE 19PW15ARTICLE DROP CONSTRAINT A2 ;

ALTER TABLE 19PW15ARTICLE ADD CONSTRAINT A2 CHECK (COLOR IN('RED','BLACK','GREEN','WHITE'));

INSERT INTO 19PW15ARTICLE VALUE('A05', 'WASHING MACHINE', 'GREEN', 20000, 'Cbe');

SELECT S.DATEOFBUSINESS FROM 19PW15SUPPLIER S JOIN 19PW15DELIVERY D ON S.SNR = D.SNR JOIN 19PW15ARTICLE A ON A.ANR = D.ANR WHERE A.COLOR = 'BLACK';

SELECT SName

FROM 19PW15SUPPLIER WHERE SNR IN (SELECT SNR FROM (SELECT SNR, RANK() OVER (ORDER BY COUNT(DISTINCT ANR) DESC) AS ranking FROM 19PW15DELIVERY GROUP BY SNR) SELECTION WHERE ranking = 1);

SELECT \* FROM 19PW15DELIVERY WHERE SNR IN (SELECT SNR FROM 19PW15SUPPLIER WHERE CITY IN (SELECT CITY FROM 19PW15SUPPLIER GROUP BY CITY HAVING COUNT(CITY) > 1));

SELECT \*

FROM Delivery WHERE SNR IN (SELECT SNR FROM 19PW15SUPPLIER WHERE CITY IN (SELECT CITY FROM 19PW15SUPPLIER GROUP BY CITY HAVING COUNT(CITY) = 1));

SELECT SNR, DATEOFBUSINESS FROM 19PW15SUPPLIER WHERE SNr IN (SELECT SNr FROM 19PW15DELIVERY GROUP BY SNr HAVING SUM(Qty) = 250);

SELECT A.\* FROM 19PW15DELIVERY INNER JOIN 19PW15ARTICLE A USING (ANR) INNER JOIN 19PW15SUPPLIER S USING (SNR) WHERE S.SNAME = 'ELGI';

SELECT A.\* FROM 19PW15ARTICLE A WHERE A.ANR IN (SELECT ANR FROM (SELECT ANR, RANK() OVER (ORDER BY SUM(QTY) DESC) AS RANKING FROM 19PW15DELIVERY GROUP BY ANR) SELECTION WHERE RANKING = 1);

SELECT DISTINCT S.CITY FROM 19PW15DELIVERY INNER JOIN 19PW15ARTICLE A USING (ANR) INNER JOIN 19PW15SUPPLIER S USING (SNR) WHERE A.ANAME = 'MICROWAVE';

SELECT S.CITY FROM 19PW15DELIVERY INNER JOIN 19PW15ARTICLE A USING (ANR) INNER JOIN 19PW15SUPPLIER S USING (SNR) WHERE A.ANAME = 'MICROWAVE' GROUP BY S.CITY HAVING COUNT(\*) > 1;

SELECT SNR, ANAME, WEIGHT, COLOR FROM 19PW15DELIVERY INNER JOIN 19PW15ARTICLE A USING (ANR) INNER JOIN 19PW15SUPPLIER S USING (SNR) WHERE (A.COLOR, SNR) IN (SELECT A.COLOR, SNR FROM 19PW15DELIVERY INNER JOIN 19PW15ARTICLE A USING (ANR) INNER JOIN 19PW15SUPPLIER S USING (SNR) GROUP BY A.COLOR, SNR HAVING COUNT(SNR) > 1) ORDER BY SNR;

SELECT \* FROM 19PW15DELIVERY INNER JOIN 19PW15SUPPLIER S USING (SNR) INNER JOIN 19PW15ARTICLE A USING (ANR) ORDER BY SNR;

SELECT A.\* FROM 19PW15DELIVERY INNER JOIN 19PW15ARTICLE A USING (ANR) ORDER BY SNR;

SELECT A.\* FROM 19PW15DELIVERY INNER JOIN 19PW15ARTICLE A USING (ANR) WHERE SNR = (SELECT SNR FROM 19PW15SUPPLIER ORDER BY SNAME DESC LIMIT 1);

SELECT DISTINCT SNAME FROM 19PW15DELIVERY INNER JOIN 19PW15SUPPLIER S USING (SNR) INNER JOIN 19PW15ARTICLE A USING (ANR) WHERE A.ANAME = 'MICROWAVE';

SELECT SNAME FROM 19PW15SUPPLIER WHERE SNR NOT IN (SELECT DISTINCT SNR FROM 19PW15DELIVERY INNER JOIN 19PW15ARTICLE ON 19PW15DELIVERY.ANR = 19PW15ARTICLE.ANR AND 19PW15ARTICLE.ANAME = 'MOBILE');

SELECT DISTINCT SNAME FROM 19PW15DELIVERY INNER JOIN 19PW15SUPPLIER S USING (SNR) INNER JOIN 19PW15ARTICLE A USING (ANR) GROUP BY SNAME HAVING COUNT(DISTINCT ANR) = (SELECT COUNT(\*) FROM 19PW15ARTICLE);

SELECT DISTINCT SNAME FROM 19PW15SUPPLIER JOIN 19PW15DELIVERY USING (SNR) WHERE ANR IN (SELECT ANR FROM 19PW15DELIVERY WHERE SNR = 'S002');

SELECT SNR, CITY FROM 19PW15SUPPLIER WHERE CITY IN (Select CITY FROM 19PW15SUPPLIER GROUP BY CITY HAVING COUNT(\*) > 1);

SELECT ANR

FROM 19PW15ARTICLE WHERE ANR NOT IN (SELECT DISTINCT D.ANR FROM 19PW15SUPPLIER INNER JOIN 19PW15DELIVERY D on 19PW15SUPPLIER.SNR = D.SNR AND 19PW15SUPPLIER.CITY = 'Delhi');

SELECT SNR FROM 19PW15SUPPLIER WHERE CITY = (Select CITY FROM 19PW15SUPPLIER ORDER BY CITY LIMIT 1);

SELECT ANR FROM 19PW15ARTICLE WHERE WEIGHT > 2000 AND ANR IN (SELECT ANR FROM 19PW15DELIVERY GROUP BY ANR HAVING COUNT(ANR) IN (SELECT COUNT(SNR) FROM 19PW15SUPPLIER));

SELECT ANAME FROM 19PW15ARTICLE INNER JOIN 19PW15DELIVERY USING (ANR) WHERE ANR NOT IN (SELECT DISTINCT ANR FROM 19PW15DELIVERY WHERE SNR != 'S001');