SQL\_TP4\_{Bassargette}\_{Prioreschi}

1)

CREATE TABLE ACHETEURS

( numach NUMBER,

nomach VARCHAR2(10) NOT NULL,

typbuv VARCHAR2(5) DEFAULT 'petit' NOT NULL,

CONSTRAINT pk\_acheteur PRIMARY KEY(numach),

CONSTRAINT typ\_typbuv CHECK(typbuv='petit' or typbuv='moyen' or typbuv='gros')

);

CREATE TABLE VINS

( nvin NUMBER,

nomcru VARCHAR2(10) NOT NULL,

annee NUMBER(4) DEFAULT 1985 NOT NULL,

degres NUMBER(3,1),

prix NUMBER(5),

CONSTRAINT numero\_vin PRIMARY KEY (nvin),

CONSTRAINT annee\_mini CHECK (annee >= 1980)

);

CREATE TABLE ACHATS

( idachat NUMBER,

nvin NUMBER NOT NULL,

numach NUMBER NOT NULL,

qte NUMBER DEFAULT 1 NOT NULL,

CONSTRAINT pk\_idachat PRIMARY KEY(idachat),

CONSTRAINT fk\_numach FOREIGN KEY(numach) references ACHETEUR(numach),

CONSTRAINT fk\_nvin FOREIGN KEY(nvin) references VINS(nvin)

);

CREATE TABLE PRODUCTEURS

( refprod NUMBER,

nomprod VARCHAR2(12) DEFAULT 'INCONNU' NOT NULL,

region VARCHAR2(10) DEFAULT 'INCONNUE' NOT NULL,

CONSTRAINT pk\_refprod PRIMARY KEY(refprod)

);

CREATE TABLE RECOLTE

( nvrec NUMBER,

refprod NUMBER NOT NULL,

datrec DATE,

qtrec NUMBER DEFAULT 1 NOT NULL,

CONSTRAINT pk\_nvrec PRIMARY KEY(nvrec,datrec,refprod),

CONSTRAINT fk\_refprod FOREIGN KEY(refprod) references PRODUCTEURS(refprod)

);

INSERT INTO VINS VALUES (1,'St Amour',1983,11.5,31);

INSERT INTO VINS VALUES (2,'Pomerol',1982,11.6,29);

INSERT INTO VINS VALUES (3,'Chenas',1986,11.3,32.5);

INSERT INTO VINS VALUES (4,'Gamay',1985,11.4,26);

INSERT INTO VINS VALUES (5,'Riesling',1983,11.9,23.5);

INSERT INTO VINS VALUES (6,'Meursault',1986,11.2,44);

INSERT INTO VINS VALUES (7,'Sauternes',1984,12.1,51);

INSERT INTO VINS VALUES (8,'Brouilly',1987,12.3,38);

INSERT INTO VINS VALUES (9,'Bergerac',1981,12.5,32);

INSERT INTO VINS VALUES (10,'Aspremont',1985,13.2,22);

INSERT INTO VINS VALUES (11,'Muscadet',1988,0.0,22.5);

INSERT INTO VINS VALUES (12,'Fleurie',1982,11.3,37);

INSERT INTO VINS VALUES (13,'Sylvaner',1985,11.9,26);

INSERT INTO VINS VALUES (14,'Cahors',1988,13.2,19.7);

INSERT INTO ACHETEUR VALUES (1,'Hardy','gros');

INSERT INTO ACHETEUR VALUES (2,'Duchenes','moyen');

INSERT INTO ACHETEUR VALUES (3,'Bernardin','petit');

INSERT INTO ACHETEUR VALUES (4,'Dreyfus','petit');

INSERT INTO ACHETEUR VALUES (5,'Letilleul','moyen');

INSERT INTO ACHETEUR VALUES (6,'Marinio','gros');

INSERT INTO ACHETEUR VALUES (7,'Dubois','gros');

INSERT INTO ACHETEUR VALUES (8,'Bussy','moyen');

INSERT INTO ACHETEUR VALUES (9,'Williams','petit');

INSERT INTO ACHETEUR VALUES (10,'Duhameau','gros');

INSERT INTO ACHETEUR VALUES (11,'Wolf','petit');

INSERT INTO ACHETEUR VALUES (12,'Henriot','moyen');

INSERT INTO ACHETEUR VALUES (13,'Richard','moyen');

INSERT INTO ACHETEUR VALUES (14,'Thomas','petit');

INSERT INTO ACHETEUR VALUES (15,'Larue','gros');

INSERT INTO PRODUCTEURS VALUES (1,'Knock','BEAUJOLAIS');

INSERT INTO PRODUCTEURS VALUES (2,'Marchand','LOIRE');

INSERT INTO PRODUCTEURS VALUES (3,'Bouteiller','BORDEAUX');

INSERT INTO PRODUCTEURS VALUES (4,'Smith','SUD-OUEST');

INSERT INTO PRODUCTEURS VALUES (5,'Delors','ALSACE');

INSERT INTO PRODUCTEURS VALUES (6,'Wagner','BEAUJOLAIS');

INSERT INTO PRODUCTEURS VALUES (7,'Lepatre','SAVOIE');

INSERT INTO PRODUCTEURS VALUES (8,'Martin','BORDEAUX');

INSERT INTO PRODUCTEURS VALUES (9,'Duchemin','BOURGOGNE');

INSERT INTO PRODUCTEURS VALUES (10,'Chevalier','BOURGOGNE');

INSERT INTO PRODUCTEURS VALUES (11,'Bresson','BEAUJOLAIS');

INSERT INTO PRODUCTEURS VALUES (12,'Ravel','SUD-OUEST');

INSERT INTO PRODUCTEURS VALUES (13,'Muguet','ALSACE');

INSERT INTO ACHATS VALUES (1,1,9,12);

INSERT INTO ACHATS VALUES (2,1,4,7);

INSERT INTO ACHATS VALUES (3,1,1,10);

INSERT INTO ACHATS VALUES (4,1,5,12);

INSERT INTO ACHATS VALUES (5,1,6,9);

INSERT INTO ACHATS VALUES (6,2,8,5);

INSERT INTO ACHATS VALUES (7,3,9,8);

INSERT INTO ACHATS VALUES (8,3,3,15);

INSERT INTO ACHATS VALUES (9,3,10,24);

INSERT INTO ACHATS VALUES (10,4,1,9);

INSERT INTO ACHATS VALUES (11,4,6,8);

INSERT INTO ACHATS VALUES (12,4,6,8);

INSERT INTO ACHATS VALUES (13,4,4,48);

INSERT INTO ACHATS VALUES (14,5,11,4);

INSERT INTO ACHATS VALUES (15,6,15,4);

INSERT INTO ACHATS VALUES (16,6,6,12);

INSERT INTO ACHATS VALUES (17,7,9,8);

INSERT INTO ACHATS VALUES (18,7,4,18);

INSERT INTO ACHATS VALUES (19,7,11,24);

INSERT INTO ACHATS VALUES (20,7,15,4);

INSERT INTO ACHATS VALUES (21,8,1,10);

INSERT INTO ACHATS VALUES (22,8,1,10);

INSERT INTO ACHATS VALUES (23,9,10,12);

INSERT INTO ACHATS VALUES (24,9,6,9);

INSERT INTO ACHATS VALUES (25,11,3,15);

INSERT INTO ACHATS VALUES (26,12,2,4);

INSERT INTO ACHATS VALUES (27,12,4,4);

INSERT INTO ACHATS VALUES (28,13,9,12);

INSERT INTO Recolte values (1, 1, to\_date('15-09-1983','DD-MM-YYYY'), 62);

INSERT INTO Recolte values (1, 6, to\_date('17-09-1983','DD-MM-YYYY'), 158);

INSERT INTO Recolte values (2, 3, to\_date('29-08-1982','DD-MM-YYYY'), 25);

INSERT INTO Recolte values (3, 11, to\_date('05-10-1986','DD-MM-YYYY'), 130);

INSERT INTO Recolte values (3, 1, to\_date('10-10-1986','DD-MM-YYYY'), 45);

INSERT INTO Recolte values (3, 5, to\_date('07-10-1986','DD-MM-YYYY'), 94);

INSERT INTO Recolte values (4, 9, to\_date('26-10-1985','DD-MM-YYYY'), 148);

INSERT INTO Recolte values (4, 10, to\_date('22-10-1985','DD-MM-YYYY'), 45);

INSERT INTO Recolte values (5, 5, to\_date('21-08-1983','DD-MM-YYYY'), 50);

INSERT INTO Recolte values (5, 13, to\_date('21-08-1983','DD-MM-YYYY'), 110);

INSERT INTO Recolte values (6, 9, to\_date('30-08-1986','DD-MM-YYYY'), 30);

INSERT INTO Recolte values (6, 10, to\_date('16-08-1986','DD-MM-YYYY'), 135);

INSERT INTO Recolte values (7, 3, to\_date('05-09-1984','DD-MM-YYYY'), 120);

INSERT INTO Recolte values (7, 8, to\_date('11-09-1984','DD-MM-YYYY'), 30);

INSERT INTO Recolte values (8, 11, to\_date('20-09-1987','DD-MM-YYYY'), 100);

INSERT INTO Recolte values (8, 11, to\_date('23-09-1987','DD-MM-YYYY'), 62);

INSERT INTO Recolte values (9, 4, to\_date('23-09-1981','DD-MM-YYYY'), 90);

INSERT INTO Recolte values (9, 12, to\_date('23-09-1981','DD-MM-YYYY'), 75);

INSERT INTO Recolte values (10, 7, to\_date('02-09-1985','DD-MM-YYYY'), 11);

INSERT INTO Recolte values (11, 2, to\_date('03-09-1985','DD-MM-YYYY'), 0);

INSERT INTO Recolte values (12, 6, to\_date('02-10-1982','DD-MM-YYYY'), 45);

INSERT INTO Recolte values (13, 5, to\_date('19-10-1985','DD-MM-YYYY'), 93);

Question 3 :

SELECT \* FROM VINS ORDER BY nomcru ASC;

SELECT DISTINCT region FROM Producteurs;

SELECT refprod,nomprod FROM Producteurs WHERE region =ANY('SAVOIE','BEAUJOLAIS');

SELECT nomach AS sobre FROM acheteur WHERE typbuv = 'petit';

SELECT nvin AS vin,numach FROM achats ORDER BY numach DESC, nvin ASC;

CREATE TABLE JEUNE

( nomcru VARCHAR2(10),

degres NUMBER(3,1)

);

INSERT INTO JEUNE (SELECT nomcru, degres FROM VINS WHERE annee >= 1985);

Question 4 :

1

SELECT nomach FROM ACHETEUR WHERE numach in (SELECT numach FROM Achats WHERE nvin in(SELECT nvin FROM vins WHERE prix>30));

2

SELECT nomprod,region,nomcru FROM producteurs NATURAL JOIN recolte JOIN vins ON nvrec=nvin WHERE qtrec>100;

3

SELECT \* FROM vins WHERE nvin in(SELECT DISTINCT nvrec AS nvin FROM recolte WHERE refprod in(SELECT refprod FROM producteurs WHERE region = 'BOURGOGNE'));

4

SELECT COUNT(\*) as nombreBuveursMoyens FROM acheteur WHERE typbuv='moyen';

5

SELECT COUNT(\*) AS NbDeFoissAcheté, SUM(qte) AS QuantitéAchetée FROM ACHATS WHERE nvin = 7;

6

SELECT SUM(qte\*prix) as commande FROM vins NATURAL JOIN achats WHERE numach IN(SELECT numach FROM acheteur WHERE nomach = 'Hardy');

7

SELECT AVG(prix) FROM vins NATURAL JOIN achats WHERE numach = 9;

8

SELECT nomprod FROM producteurs NATURAL JOIN recolte WHERE qtrec = 45;

9

SELECT DISTINCT nomach FROM acheteur NATURAL JOIN achats WHERE nvin = ANY(1,7,12);

10

SELECT \* FROM vins WHERE nvin NOT IN (SELECT nvin FROM achats);

11

SELECT \* FROM vins NATURAL JOIN achats NATURAL JOIN acheteur WHERE annee < 1984 AND typbuv != 'petit';

12

CREATE VIEW sommeAchats (numach, qteAchetee) AS SELECT numach,SUM(qte) FROM achats GROUP BY numach;

SELECT nomach FROM acheteur WHERE numach IN(SELECT numach FROM sommeAchats WHERE qteAchetee>(SELECT AVG(qteAchetee) FROM sommeAchats));

13

SELECT DISTINCT numach, nomach FROM acheteur NATURAL JOIN achats WHERE numach NOT IN(SELECT numach FROM achats NATURAL JOIN vins WHERE nomcru = 'St Amour') ORDER BY numach;