BENHOCINE AYYOUB – TP:5 – G: 04

1.

SELECT DISTINCT A.IdAvion from Avion A, Pilote P,Piloter R WHERE (A.IdAvion = R.IdAvion AND P.IdPilote = R.IdPilote AND A.nom = 'Boeing 777' AND A.DateConst<=20101231 AND P.nationalité = 'algerien');

2.

SELECT A.IdAvion from Avion A WHERE NOT EXISTS (SELECT * FROM Pilote P, Piloter R WHERE (P.IdPilote = R.IdPilote) AND (A.IdAvion = R.IdAvion) AND (P.nationalité != 'algerien')) AND EXISTS (SELECT * FROM Piloter R WHERE (A.IdAvion=R.IdAvion));

3.a

SELECT C.IdCompagnie, C.nom FROM Compagnie C WHERE NOT EXISTS (SELECT H.IdCompagnie FROM Achat H, Avion A WHERE (H.IdCompagnie=C.IdCompagnie) AND (A.IdAvion=H.IdAvion) AND (A.nom like '%Boeing%'));

3.b

SELECT C.IdCompagnie, C.nom FROM Compagnie C WHERE C.IdCompagnie NOT IN (SELECT H.IdCompagnie FROM Avion A, Achat H WHERE (A.IdAvion = H.IdAvion AND A.nom like '%Boeing%'));

4.

SELECT DISTINCT P.IdPilote, P.nom, P.prenom FROM Pilote P, Piloter R WHERE (P.IdPilote=R.IdPilote) AND R.IdAvion IN (SELECT A.IdAvion FROM Avion A, Constructeur C WHERE (A.IdConstructeur = C.IdConstructeur) AND ((C.nom='Boeing') or (C.nom='Airbus')));

5.

SELECT P.* FROM Pilote P WHERE P.IdPilote IN (SELECT R2.IdPilote from Piloter R, Piloter R2 WHERE (R.IdPilote=R2.IdPilote) AND R.IdAvion IN (SELECT A.IdAvion FROM Avion A, Constructeur C WHERE (A.IdConstructeur=C.IdConstructeur) AND (C.nom='Airbus')) AND R2.IdAvion IN (SELECT A.IdAvion FROM Avion A, Constructeur C WHERE (A.IdConstructeur=C.IdConstructeur) AND (C.nom='Boeing')));

6.

SELECT A.* , SUM(H.Quantite)
FROM Avion A ,Achat H ,Constructeur C WHERE (A.IdAvion=H.IdAvion) AND (C.IdConstructeur=A.IdConstructeur)
WHERE (C.nom='Air Algerie')FROUP BY A.IdAvion
HAVING SUM(H.Quantite) >= ALL (SELECT SUM(H.Quantite) FROM Avion A, Achat H, Constructeur C WHERE (A.IdAvion=H.IdAvion) AND (C.IdConstructeur=A.IdConstructeur)
WHERE (C.nom='Air Algerie')GROUP BY A.IdAvion);

7.

SELECT c.* from Compagnie c WHERE NOT EXISTS (SELECT * FROM Avion a, Achat h WHERE (a.IdAvion=h.IdAvion) AND (c.IdCompagnie=h.IdCompagnie) AND (a.nom!='Airbus'));

8.

Il n y a pas champ prix pour les avions

9.

SELECT DISTINCT e.* FROM Aeroport e, Dessert d, Avion a WHERE (e.IdAer=d.IdAer) AND   (d.IdAvion=a.IdAvion) AND (a.nom='Boeing 767') AND (d.NB_Fois_Semaine >= 10);

10.

SELECT DISTINCT e.* FROM Aeroport e, Dessert d, Avion a, Constructeur C WHERE (e.IdAer=d.IdAer) AND (d.IdAvion=a.IdAvion) AND (C.nom='Boeing') AND (d.NB_Fois_Semaine >= 10);

11.
```
SELECT c.nom, a.nom
FROM Compagnie c, Avion a, Achat h WHERE (c.IdCompagnie=h.IdCompagnie) AND
(a.IdAvion=h.IdAvion)
GROUP BY c.IdCompagnie, a.IdAvion HAVING SUM(h.Quantite) >= (SELECT
AVG(h2.Quantite) FROM Achat h2 WHERE (h2.IdAvion=a.IdAvion));
```
12.
```
SELECT s.IdConstructeur, s.nom, SUM(h.Quantite)
FROM Constructeur s , Avion a, Achat h WHERE (s.IdConstructeur=a.IdConstructeur)
AND (a.IdAvion=h.IdAvion)
GROUP BY s.IdConstructeur;
```
13.
```
SELECT c.IdCompagnie, c.nom, SUM(h.Quantite)
FROM Compagnie c, Achat h WHERE (c.IdCompagnie=h.IdCompagnie)
GROUP BY c.IdCompagnie
HAVING COUNT(distinct h.IdAvion) > 5;
```
14.a
```
SELECT c.*
FROM Compagnie c WHERE NOT EXISTS (SELECT * FROM Constructeur s, Avion a
WHERE (s.IdConstructeur=a.IdConstructeur) AND (s.nom='Boeing') AND  (a.IdAvion
NOT IN (SELECT h.IdAvion  FROM Achat h WHERE
(h.IdCompagnie=c.IdCompagnie))));
```
14.b
```
SELECT c.*
FROM Compagnie  c, Achat h, Avion a , Constructeur s
WHERE (c.IdCompagnie=h.IdCompagnie) AND (a.IdAvion=h.IdAvion) AND
(s.IdConstructeur=a.IdConstructeur) AND (s.nom='Boeing')
GROUP BY c.IdCompagnie HAVING COUNT(*) = (select count(*)from Avion a,
Constructeur s, achat h where (s.IdConstructeur=a.IdConstructeur) and
(a.IdAvion=h.IdAvion) AND (s.nom='Boeing'));
```
15.a
```
SELECT a.*
FROM Avion a
WHERE NOT EXISTS(SELECT * FROM Aeroport e WHERE e.IdAer NOT IN (SELECT
d.IdAer FROM Dessert d WHERE a.IdAvion=d.IdAvion));
```
15.b
```
SELECT a.*
FROM Avion a , Aeroport e, Dessert d
WHERE (a.IdAvion=d.IdAvion) AND (e.IdAer=d.IdAer)
GROUP BY a.IdAvion HAVING COUNT(e.IdAer) = (SELECT COUNT(e.IdAer) FROM
Aeroport e);
```
16.
```
SELECT c.*
FROM Compagnie c
WHERE NOT EXISTS (SELECT * FROM Achat h WHERE (h.IdCompagnie='3') AND
h.IdAvion NOT IN (SELECT h2.IdAvion FROM Achat h2 WHERE
(h2.IdCompagnie=c.IdCompagnie)));
```

```
CREATE OR REPLACE VIEW V_avion AS SELECT a.nom,a.categorie,a.nbPlaces FROM
Avion a ;
```

CREATE OR REPLACE VIEW V_Boeing AS SELECT a.IdAvion,a.nom,a.categorie,a.nbPlaces,a.DateConstruction,a.IdConstructeur FROM Avion a LEFT JOIN Constructeur s ON a.IdConstructeur=s.IdConstructeur WHERE s.nom='Boeing;

CREATE OR REPLACE VIEW V_Boeing_777 AS SELECT IdAvion,nom,categorie,NbPlaces,DateConstruction FROM V_Boeing WHERE nom='Boieng777;