

Solution du TP 4

creaDynamique.sql

```
--Création dynamique de tables

--

CREATE TABLE Softs AS SELECT nomLog, Version, prix FROM Logiciel;

ALTER TABLE Softs CHANGE nomLog nomSoft VARCHAR(20);

SELECT * FROM Softs;

--

CREATE TABLE PCSeuls
    AS SELECT nPoste, nomPoste, IndIP, ad, typePoste, nSalle
    FROM Poste
    WHERE typePoste = 'PCNT' OR typePoste = 'PCWS';

ALTER TABLE PCSeuls CHANGE nPoste np VARCHAR(7);

ALTER TABLE PCSeuls CHANGE nomPoste nomP VARCHAR(20);

ALTER TABLE PCSeuls CHANGE IndIP seg VARCHAR(11);

ALTER TABLE PCSeuls CHANGE typePoste typeP VARCHAR(9);

ALTER TABLE PCSeuls CHANGE nSalle lieu VARCHAR(9);

SELECT * FROM PCSeuls;
```

Requetes.sql

```
--1  Type du poste p8
SELECT nPoste, typePoste
    FROM Poste WHERE nPoste = 'p8';

--2  Noms des logiciels UNIX
SELECT nomLog
    FROM Logiciel
    WHERE typeLog = 'UNIX';

--3  Nom, adresse IP, numéro de salle des postes de type UNIX ou PCWS.
SELECT nomPoste, indIP, ad, nSalle
    FROM poste
    WHERE typePoste = 'UNIX'
    OR    typePoste = 'PCWS';

--4  Même requête pour les postes du segment 130.120.80 triés
```

```

--par numéro de salle décroissant
SELECT nomPoste, indIP, ad, nSalle
  FROM poste
 WHERE (typePoste = 'UNIX'
        OR   typePoste = 'PCWS')
 AND   indIP = '130.120.80'
      ORDER BY nSalle DESC;

--5  Numéros des logiciels installés sur le poste p6.
SELECT  nLog
  FROM  Installer
 WHERE  nPoste = 'p6';

--6  Numéros des postes qui hébergent le logiciel log1.
SELECT  nPoste
  FROM  Installer
 WHERE  nLog = 'log1';

--7  Nom et adresse IP complète (ex : 130.120.80.01) des postes de
type TX
SELECT  nomPoste, CONCAT(indIP, '.', ad)
  FROM  Poste
 WHERE  typePoste = 'TX';

--8
SELECT  nPoste, COUNT(nLog)
  FROM  installer
 GROUP BY (nPoste);

--9
SELECT  nSalle, COUNT(nPoste)
  FROM  Poste
 GROUP BY (nSalle)
 ORDER BY 2;

--10
SELECT  nLog, COUNT(nPoste)
  FROM  Installer
 GROUP BY (nLog);

--11
SELECT  AVG(prix)
  FROM  Logiciel
 WHERE  typeLog = 'UNIX';

--12
SELECT  MAX(dateAch)
  FROM  Logiciel;

--13
SELECT  nPoste FROM Installer

```

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GROUP BY nPoste
HAVING COUNT(nLog)=2;

--14
SELECT COUNT(*) FROM
  (SELECT nPoste FROM Installer GROUP BY nPoste HAVING COUNT(nLog)=2)
T;

--15
SELECT DISTINCT typeLP FROM Types
WHERE typeLP NOT IN (SELECT DISTINCT typePoste FROM Poste);

--16
SELECT DISTINCT typeLog FROM Logiciel
WHERE typeLog IN (SELECT typePoste FROM Poste);

--17
SELECT DISTINCT typePoste FROM Poste
WHERE typePoste NOT IN (SELECT typeLog FROM Logiciel);

--18
SELECT  CONCAT(indIP, '.',ad)
FROM    Poste
WHERE   nPoste IN
        (SELECT nPoste
         FROM    Installer
         WHERE   nLog = 'log6');

--19
SELECT  CONCAT(indIP, '.',ad)
FROM    Poste
WHERE   nPoste IN
        (SELECT nPoste
         FROM    Installer
         WHERE   nLog =
                (SELECT nLog
                 FROM    Logiciel
                 WHERE   nomLog = 'Oracle 8'));

--20
SELECT  nomSegment
FROM    Segment
WHERE   indIP IN
        (SELECT  indIP
         FROM     Poste
         WHERE    typePoste = 'TX'
         GROUP BY indIP
         HAVING   COUNT(*)=3);

--21
SELECT  nomSalle
FROM    Salle

```

```

WHERE nSalle IN
    (SELECT nSalle
     FROM   Poste
     WHERE  nPoste IN
         (SELECT nPoste
          FROM   Installer
          WHERE  nLog =
              (SELECT nLog
               FROM   Logiciel
               WHERE  nomLog = 'Oracle 6'))));

--22 Nom du logiciel ayant la date d'achat la plus récente (utiliser
la requête 12).
SELECT  nomLog
FROM    Logiciel
WHERE   dateAch =
        (SELECT MAX(dateAch) FROM Logiciel);

--23 Adresse IP des postes qui hébergent le logiciel 'log6'.
SELECT  CONCAT(indIP, '.', ad)
FROM    Poste p, Installer i
WHERE   p.nPoste = i.nPoste
AND     i.nLog    = 'log6';

--24 Adresse IP des postes qui hébergent le logiciel de nom 'Oracle 8'
SELECT  CONCAT(indIP, '.', ad)
FROM    Poste p, Installer i, Logiciel l
WHERE   p.nPoste = i.nPoste
AND     l.nLog    = i.nLog
AND     l.nomLog  = 'Oracle 8';

--25 Noms des segments possédant exactement trois postes de travail de
type 'TX'
SELECT  s.nomSegment
FROM    Segment s, Poste p
WHERE   s.indIP    = p.indIP
AND     p.typePoste = 'TX'
GROUP  BY s.nomSegment
HAVING COUNT(*)=3;

--26 Noms des salles où l'on peut trouver au moins un poste hébergeant
'Oracle 6'
SELECT  s.nomSalle
FROM    Salle s, Poste p, Installer i, Logiciel l
WHERE   s.nSalle   = p.nSalle
AND     p.nPoste   = i.nPoste
AND     i.nLog      = l.nLog
AND     l.nomLog    = 'Oracle 6';

--27
SELECT sg.nomSegment, s.nSalle, p.indIP||'.' || p.ad, l.nomLog,
i.dateIns

```

```

FROM segment sg, Salle s, Poste p, Logiciel l, Installer i
WHERE s.nSalle = p.nSalle
AND s.indIP = sg.indIP
AND p.nPoste = i.nPoste
AND i.nLog = l.nLog
ORDER BY 1,2,3;

```

--SQL2

--28 Adresse IP des postes qui hébergent le logiciel 'log6'.

```

SELECT CONCAT(indIP, '.', ad)
FROM Poste NATURAL JOIN Installer
WHERE nLog = 'log6';

```

--29 Adresse IP des postes qui hébergent le logiciel de nom 'Oracle 8'

```

SELECT CONCAT(indIP, '.', ad)
FROM Poste NATURAL JOIN Installer
NATURAL JOIN Logiciel
WHERE nomLog = 'Oracle 8';

```

--30 Noms des segments possédant exactement trois postes de travail de type 'TX'

```

SELECT nomSegment
FROM Segment JOIN Poste USING(indIP)
WHERE typePoste = 'TX'
GROUP BY nomSegment
HAVING COUNT(*)=3;

```

--31 Noms des salles où l'on peut trouver au moins un poste hébergeant 'Oracle 6'

```

SELECT nomSalle
FROM Salle NATURAL JOIN Poste
NATURAL JOIN Installer
NATURAL JOIN Logiciel
WHERE nomLog = 'Oracle 6';

```

--32

```

SELECT nomPoste
FROM Poste p
WHERE EXISTS
  (SELECT DISTINCT i1.nLog
   FROM Installer i1
   WHERE i1.nPoste = p.nPoste
   AND i1.nLog IN
    (
      SELECT i2.nLog
      FROM Installer i2
      WHERE i2.nPoste = 'p6')
  )
AND NOT (nPoste = 'p6');

```

```
--33
SELECT  nomPoste
FROM Poste p
WHERE NOT EXISTS
    (SELECT DISTINCT i2.nLog
     FROM   Installer i2
     WHERE  i2.nPoste = 'p6'
     AND    i2.nLog NOT IN
    (
        SELECT i1.nLog
        FROM   Installer i1
        WHERE  i1.nPoste = p.nPoste))
AND NOT (nPoste = 'p6');
```

```
--34
SELECT  nomPoste
FROM Poste p
WHERE NOT EXISTS
    (SELECT i2.nLog
     FROM   Installer i2
     WHERE  i2.nPoste = 'p2'
     AND    i2.nLog NOT IN
    (
        SELECT i1.nLog
        FROM   Installer i1
        WHERE  i1.nPoste = p.nPoste))
AND NOT EXISTS
    (SELECT i1.nLog
     FROM   Installer i1
     WHERE  i1.nPoste = p.nPoste
     AND    i1.nLog NOT IN
    (
        SELECT i2.nLog
        FROM   Installer i2
        WHERE  i2.nPoste = 'p2'))
AND NOT (nPoste = 'p2');
```

modifSynchronisées.sql

```
INSERT INTO installer (nPoste,nLog,dateIns,delai) VALUES
('p2','log6',SYSDATE(),NULL);
```

```
INSERT INTO installer (nPoste,nLog,dateIns,delai) VALUES
('p8','log1',SYSDATE(),NULL);
```

```
INSERT INTO installer (nPoste,nLog,dateIns,delai) VALUES
('p10','log1',SYSDATE(),NULL);
```

```
SELECT * FROM Installer;
```

```
UPDATE Segment seg
  SET seg.nbSalle =
      (SELECT COUNT(*)
       FROM   Salle sal
       WHERE  seg.indIP = sal.indIP);
```

```
UPDATE Segment seg
  SET seg.nbPoste =
      (SELECT COUNT(*)
       FROM   Poste pos
       WHERE  seg.indIP = pos.indIP);
```

```
SELECT * FROM Segment;
```

```
UPDATE Logiciel l
  SET l.nbInstall =
      (SELECT COUNT(*)
       FROM   Installer i
       WHERE  l.nLog = i.nLog);
```

```
SELECT * FROM Logiciel ;
```

```
UPDATE Poste p
  SET p.nLog =
      (SELECT COUNT(*)
       FROM   Installer i
       WHERE  p.nPoste = i.nPoste);
```

```
SELECT * FROM Poste ;
```