

TD de Bases de données n° 4

Join et interprétation de requêtes

Exercice 1 : Soient les deux tables suivantes :

a

| c1 | c2 | c3 | c4 |
|----|------|----|-----|
| 5 | flop | 3 | 1.5 |
| 2 | flop | 7 | 3.5 |
| 8 | flop | 1 | 2 |
| 8 | ty | 6 | 4 |
| 7 | jola | 3 | 5.5 |
| | ri | 1 | 3 |

b

| c5 | c6 | c7 |
|----|----|-----|
| 2 | 3 | 1.5 |
| 6 | 9 | 0.5 |
| 8 | 4 | 8 |
| | 5 | 7 |

Donnez les réponses aux requêtes suivantes :

1. SELECT SUM(c3), AVG(c4), SUM(c6) FROM a JOIN b ON c1=c5;
réponse :
2. SELECT SUM(c3), AVG(c4), SUM(c6) FROM a LEFT JOIN b ON c1=c5;
réponse :
3. SELECT SUM(c3), AVG(c4), SUM(c6) FROM a RIGHT JOIN b ON c1=c5;
réponse :
4. SELECT SUM(c3), AVG(c4), SUM(c6) FROM a FULL JOIN b ON c1=c5;
réponse :
5. SELECT SUM(c3), AVG(c4), SUM(c6) FROM a CROSS JOIN b;
réponse :
6. SELECT c2, SUM(c3), AVG(c4), SUM(c6) FROM a JOIN b ON c1=c5 GROUP BY c2;
réponse :
7. SELECT c2, SUM(c3), AVG(c4), SUM(c6) FROM a LEFT JOIN b ON c1=c5 GROUP BY c2;
réponse :

8. SELECT c2, SUM(c3), AVG(c4), SUM(c6) FROM a RIGHT JOIN b ON c1=c5 GROUP BY c2;

réponse :

9. SELECT c2, SUM(c3), AVG(c4), SUM(c6) FROM a FULL JOIN b ON c1=c5 GROUP BY c2;

réponse :

10. SELECT c2, SUM(c3), AVG(c4), SUM(c6) FROM a CROSS JOIN b GROUP BY c2;

réponse :

11. SELECT c2, SUM(c3), avg(c4), SUM(c6) FROM a FULL JOIN b ON c1=c5 WHERE c2<>'ty' GROUP BY c2 HAVING SUM(c3)<10 ORDER BY c2;

réponse :

12. SELECT DISTINCT a1.c1, a1.c2 FROM a a1, a a2 WHERE a1.c1 < a2.c1 AND (a1.c2, a1.c4) IN (SELECT c2, min(c4) FROM a GROUP BY c2) AND (a2.c2, a2.c4) IN (SELECT c2, MAX(c4) FROM a GROUP BY c2);

réponse :

13. SELECT DISTINCT a1.c1, a1.c2 FROM a a1 JOIN a a2 ON a1.c1=a2.c1 WHERE a1.c4 > ALL (SELECT c7 FROM b WHERE c5 < c6);

réponse :

14. SELECT DISTINCT a1.c1, a1.c2 FROM a a1 JOIN a a2 ON a1.c1=a2.c1 WHERE a1.c4 = ANY (SELECT c7 FROM b WHERE c5 < c6);

réponse :