TD de Bases de données n° 3

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 réponse aux requêtes suivantes :

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