

## SQL (Q1 versus Q2)

On considère les relations R(A, B) et S(A,B) où :

- L'attribut A est une **clé**, B n'est pas une clé
- Les 2 relations ne contiennent pas de valeur NULL.

Dire pour les couples de requêtes Q1 et Q2 ci-dessous si OUI ou NON les requêtes sont équivalentes c'est à dire retournent exactement les mêmes valeurs.

Numéro	Q1	Q2
1	SELECT A FROM R WHERE B IN (SELECT B FROM S)	SELECT R.A FROM R, S WHERE R.B = S.B
2	SELECT A FROM R WHERE B IN (SELECT B FROM S)	SELECT DISTINCT R.A FROM R, S WHERE R.B = S.B
3	SELECT B FROM R WHERE A IN (SELECT A FROM S)	SELECT R.B FROM R, S WHERE R.A = S.A
4	SELECT B FROM R WHERE A IN (SELECT A FROM S)	SELECT DISTINCT R.B FROM R, S WHERE R.A = S.A
5	SELECT B FROM R WHERE B IN (SELECT B FROM S)	SELECT DISTINCT R.B FROM R, S WHERE R.B = S.B
6	SELECT A FROM R WHERE A NOT IN (SELECT A FROM S)	SELECT R.A FROM R, S WHERE R.A <> S.A
7	SELECT A FROM R	SELECT A FROM R GROUP BY A
8	SELECT B FROM R	SELECT B FROM R GROUP BY B
9	SELECT * FROM R WHERE B <> ALL (SELECT B FROM S)	SELECT * FROM R WHERE 1 > (SELECT COUNT(*) FROM S WHERE S.B = R.B)
10	SELECT MAX(A) FROM R	SELECT A FROM R WHERE A > ALL (SELECT A FROM R)