The relational set operators UNION, INTERSECT, and MINUS work properly only if the relations are union-compatible. Discuss union-compatible with examples for each and how would you check for this condition

When looking at two sets, for example, they’re considered to be union-compatible if they have the same degree and the corresponding attributes are the same. The degree of a relation is the number of attributes it contains.

Example:

R = {0,1,2} the degree equals 3. The attributes are the same and in this case are positive integers.

S = {9,8,7} set S is considered union-compatible with set R because they have the same degree and same attributes.

UNION and INTERSECT are not dependent on the order of relations, but MINUS is.

R UNION S 🡪 {0,1,2,9,8,7}

R MINUS S 🡪 {0,1,2} nothing in S to take away from set R

R INTERSECT S 🡪 {} there’s nothing that is the same in either set rendering the resultant set empty