b.

There is no problem running the queries but I don’t think that the result is correct. It is because if there are more than one records of a specific product\_key being purchased or shipped, the full outer join will create duplication to match the join and the result will be exaggerated many time by using sum().

select coalesce(o.product\_key, s.product\_key) as pkey,

sum(o.quantity\_ordered) as ordered,

sum(s.quantity\_shipped) as shipped

from order\_facts as o full outer join shipment\_facts as s

on (o.product\_key=s.product\_key)

group by pkey

order by pkey;

c.

By summing the quantity\_ordered and quantity\_shipped before the join, there will be no duplication in the full outer join since there is only one instance of each product\_key

WITH

    o AS(

        SELECT product\_key, sum(quantity\_ordered) as ordered

        FROM order\_facts

        GROUP BY product\_key

    ),

    s AS(

        SELECT product\_key, sum(quantity\_shipped) as shipped

        FROM shipment\_facts

        GROUP BY product\_key

    )

    SELECT COALESCE(o.product\_key, s.product\_key) as pkey, ordered, shipped

    FROM o FULL OUTER JOIN s ON (o.product\_key = s.product\_key)

    ORDER BY pkey