## Query 7: Rewrite Query 3 without CUBE, ROLLUP, or GROUPING SETS

Rewrite query 3 without the usage of the CUBE, ROLLUP, or GROUPING SETS operators. In rewriting the query, you should use NULL as the default value for each column.

SELECT CompanyName, BPName, SUM(ExtCost) AS COSTSUM, SUM(Quantity) AS QuanSum

FROM Inventory\_fact,branch\_plant\_dim,company\_dim

WHERE Inventory\_fact.BRANCHPLANTKEY = branch\_plant\_dim.BRANCHPLANTKEY

AND branch\_plant\_dim.COMPANYKEY = company\_dim.COMPANYKEY

AND Inventory\_fact.TransTypeKey = 2

GROUP BY CompanyName,BPName

UNION

SELECT CompanyName, NULL, SUM(ExtCost) AS COSTSUM, SUM(Quantity) AS QuanSum

FROM Inventory\_fact,branch\_plant\_dim,company\_dim

WHERE Inventory\_fact.BRANCHPLANTKEY = branch\_plant\_dim.BRANCHPLANTKEY

AND branch\_plant\_dim.COMPANYKEY = company\_dim.COMPANYKEY

AND Inventory\_fact.TransTypeKey = 2

GROUP BY CompanyName

UNION

SELECT NULL, NULL,SUM(ExtCost) AS COSTSUM, SUM(Quantity) AS QuanSum

FROM Inventory\_fact,branch\_plant\_dim,company\_dim

WHERE Inventory\_fact.BRANCHPLANTKEY = branch\_plant\_dim.BRANCHPLANTKEY

AND branch\_plant\_dim.COMPANYKEY = company\_dim.COMPANYKEY

AND Inventory\_fact.TransTypeKey = 2

ORDER BY 1,2;

