## 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 cd.COMPANYNAME, bpd.BPNAME,

SUM(f.EXTCOST),

SUM(f.QUANTITY)

FROM INVENTORY\_FACT f

INNER JOIN BRANCH\_PLANT\_DIM bpd

ON bpd.BRANCHPLANTKEY = f.BRANCHPLANTKEY

INNER JOIN COMPANY\_DIM cd

ON bpd.COMPANYKEY = cd.COMPANYKEY

WHERE f.TRANSTYPEKEY = 2

GROUP BY cd.COMPANYNAME, bpd.BPNAME

UNION

SELECT cd.COMPANYNAME, NULL,

SUM(f.EXTCOST),

SUM(f.QUANTITY)

FROM INVENTORY\_FACT f

INNER JOIN BRANCH\_PLANT\_DIM bpd

ON bpd.BRANCHPLANTKEY = f.BRANCHPLANTKEY

INNER JOIN COMPANY\_DIM cd

ON bpd.COMPANYKEY = cd.COMPANYKEY

WHERE f.TRANSTYPEKEY = 2

GROUP BY cd.COMPANYNAME

UNION

SELECT NULL, bpd.BPNAME,

SUM(f.EXTCOST),

SUM(f.QUANTITY)

FROM INVENTORY\_FACT f

INNER JOIN BRANCH\_PLANT\_DIM bpd

ON bpd.BRANCHPLANTKEY = f.BRANCHPLANTKEY

INNER JOIN COMPANY\_DIM cd

ON bpd.COMPANYKEY = cd.COMPANYKEY

WHERE f.TRANSTYPEKEY = 2

GROUP BY bpd.BPNAME

UNION

SELECT NULL, NULL,

SUM(f.EXTCOST),

SUM(f.QUANTITY)

FROM INVENTORY\_FACT f

INNER JOIN BRANCH\_PLANT\_DIM bpd

ON bpd.BRANCHPLANTKEY = f.BRANCHPLANTKEY

INNER JOIN COMPANY\_DIM cd

ON bpd.COMPANYKEY = cd.COMPANYKEY

WHERE f.TRANSTYPEKEY = 2

