## Query 6: Rewrite Query 1 without CUBE, ROLLUP, or GROUPING SETS

Rewrite query 1 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 dd.CALMONTH,

NULL,

SUM(f.EXTCOST),

SUM(f.QUANTITY)

FROM INVENTORY\_FACT f

INNER JOIN CUST\_VENDOR\_DIM cvd

ON f.CUSTVENDORKEY = cvd.CUSTVENDORKEY

INNER JOIN DATE\_DIM dd

ON dd.DATEKEY = f.DATEKEY

WHERE dd.CALYEAR = 2011

AND f.TRANSTYPEKEY=5

GROUP BY dd.CALMONTH

UNION

SELECT NULL,

cvd.ADDRCATCODE1,

SUM(f.EXTCOST),

SUM(f.QUANTITY)

FROM INVENTORY\_FACT f

INNER JOIN CUST\_VENDOR\_DIM cvd

ON f.CUSTVENDORKEY = cvd.CUSTVENDORKEY

INNER JOIN DATE\_DIM dd

ON dd.DATEKEY = f.DATEKEY

WHERE dd.CALYEAR = 2011

AND f.TRANSTYPEKEY=5

GROUP BY cvd.ADDRCATCODE1

UNION

SELECT dd.CALMONTH,

cvd.ADDRCATCODE1,

SUM(f.EXTCOST),

SUM(f.QUANTITY)

FROM INVENTORY\_FACT f

INNER JOIN CUST\_VENDOR\_DIM cvd

ON f.CUSTVENDORKEY = cvd.CUSTVENDORKEY

INNER JOIN DATE\_DIM dd

ON dd.DATEKEY = f.DATEKEY

WHERE dd.CALYEAR = 2011

AND f.TRANSTYPEKEY=5

GROUP BY dd.CALMONTH, cvd.ADDRCATCODE1

UNION

SELECT NULL,

NULL,

SUM(f.EXTCOST),

SUM(f.QUANTITY)

FROM INVENTORY\_FACT f

INNER JOIN CUST\_VENDOR\_DIM cvd

ON f.CUSTVENDORKEY = cvd.CUSTVENDORKEY

INNER JOIN DATE\_DIM dd

ON dd.DATEKEY = f.DATEKEY

WHERE dd.CALYEAR = 2011

AND f.TRANSTYPEKEY=5

