INFS3200 Advanced Database Systems

**Prac 2: Distributed Databases (5%)**

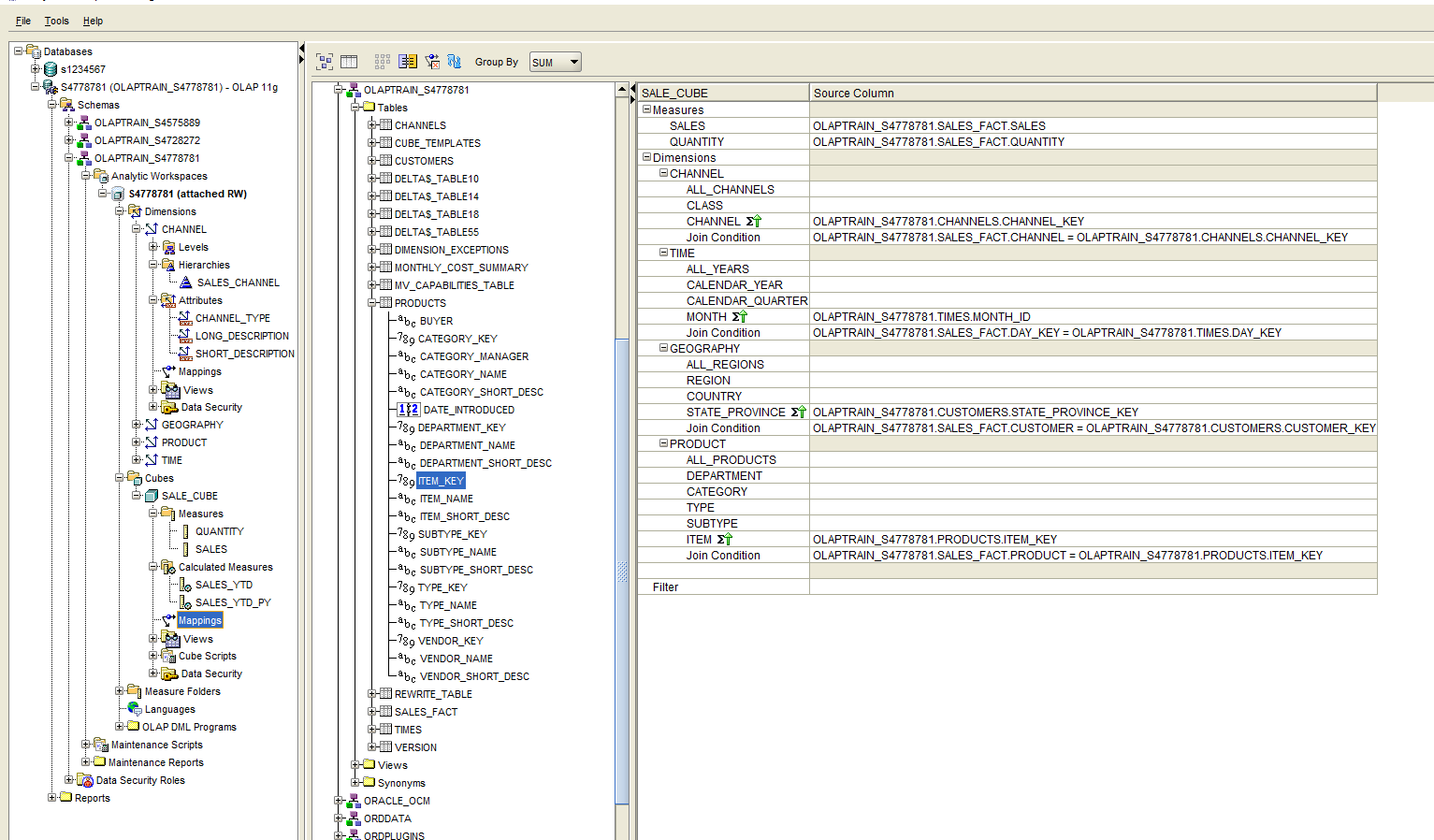
*Semester 1, 2023*

**Student’s name: Nguyen Van Quoc Chuong**

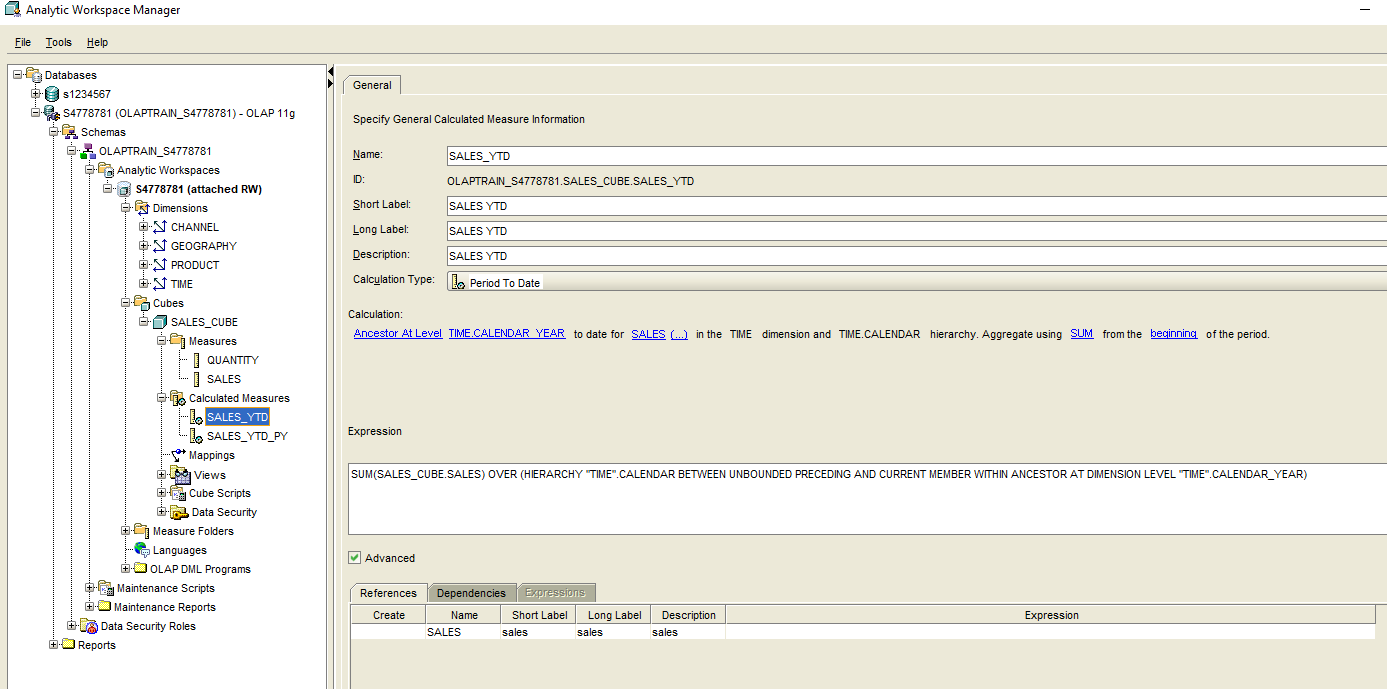
**ID: 47787810**

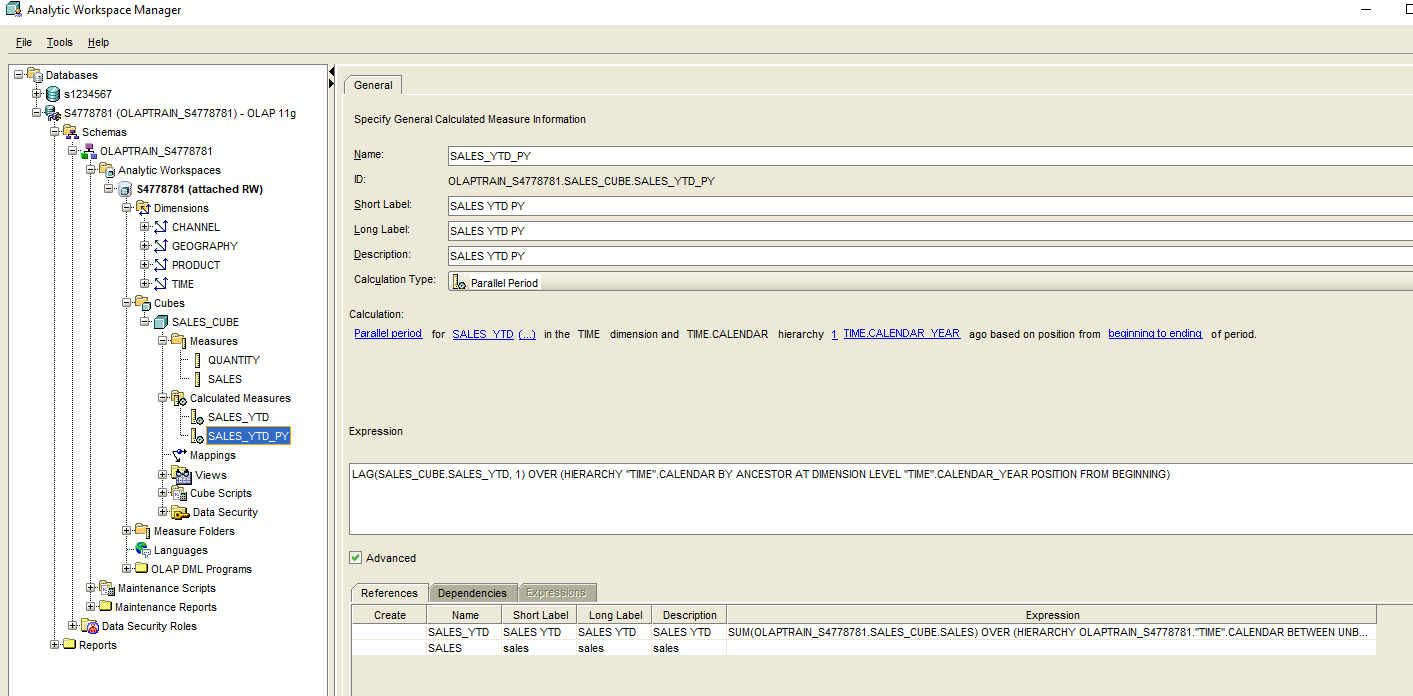
***Task 1:***

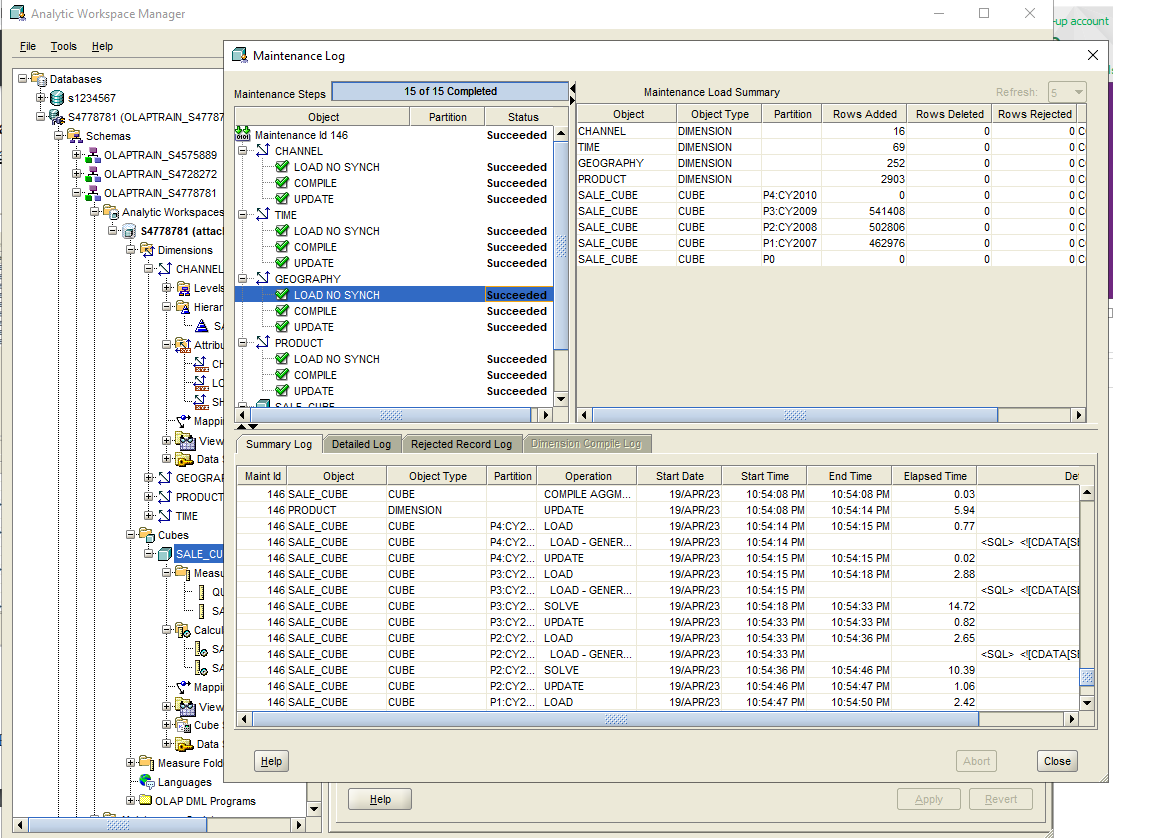
Mapping:



Sale\_YTD calculated measure:



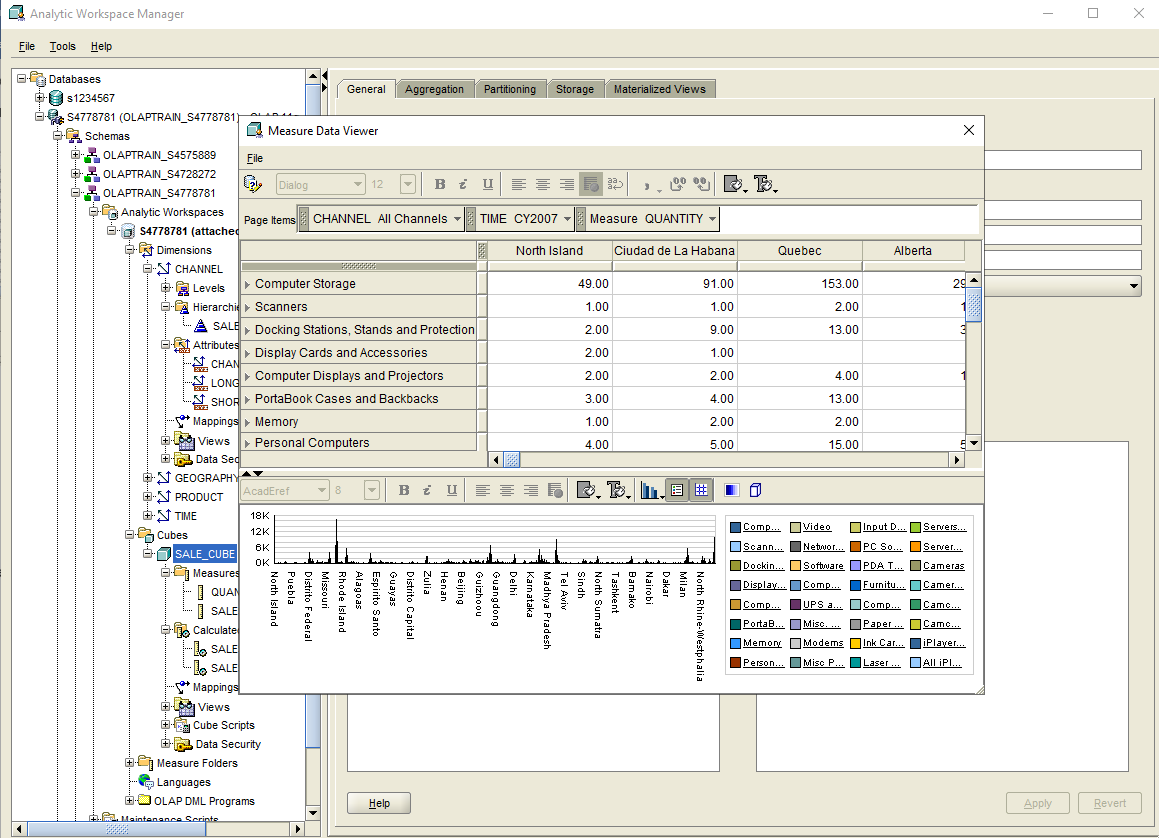
SALES\_YTD\_PY calculated measure:

***Task 2:***

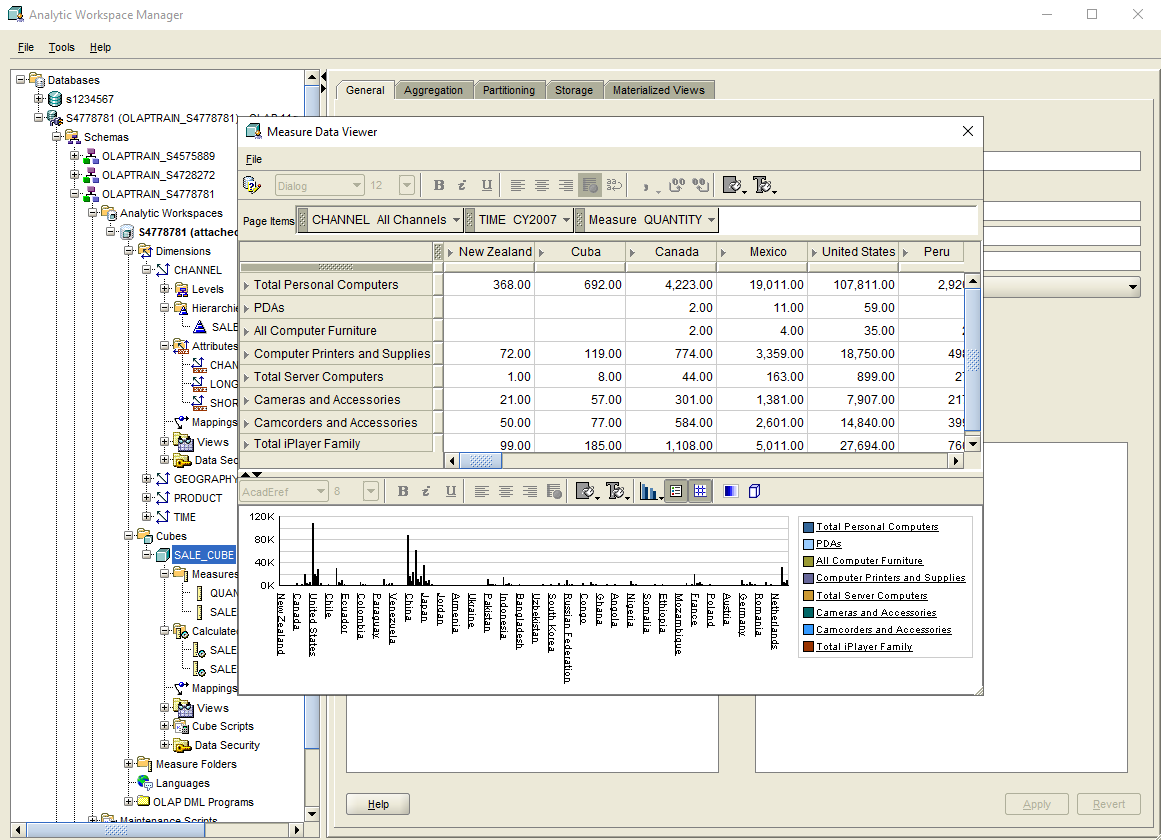
***Task 3:***

**1/**

a/ Roll-up: I do the roll-up operation to change view from Type to Category dimension in Product and from State\_Province to Country in the Geography dimension.

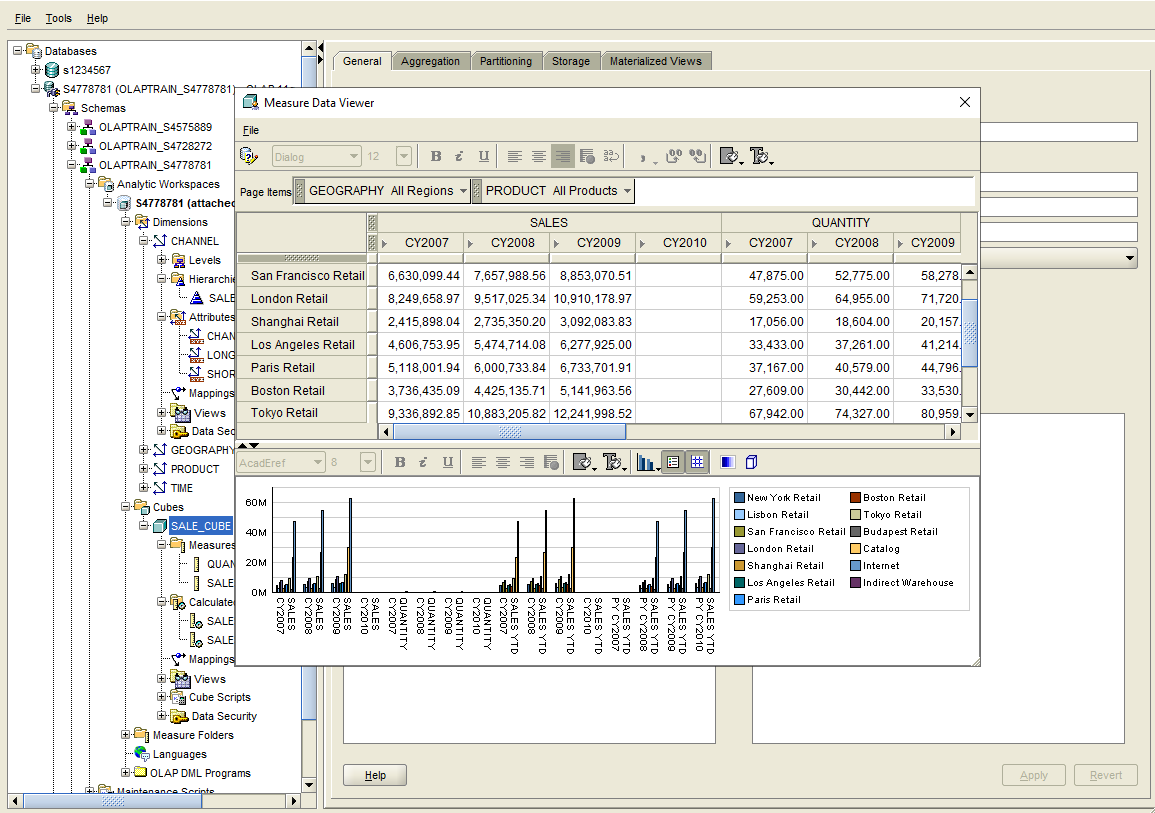
Before:

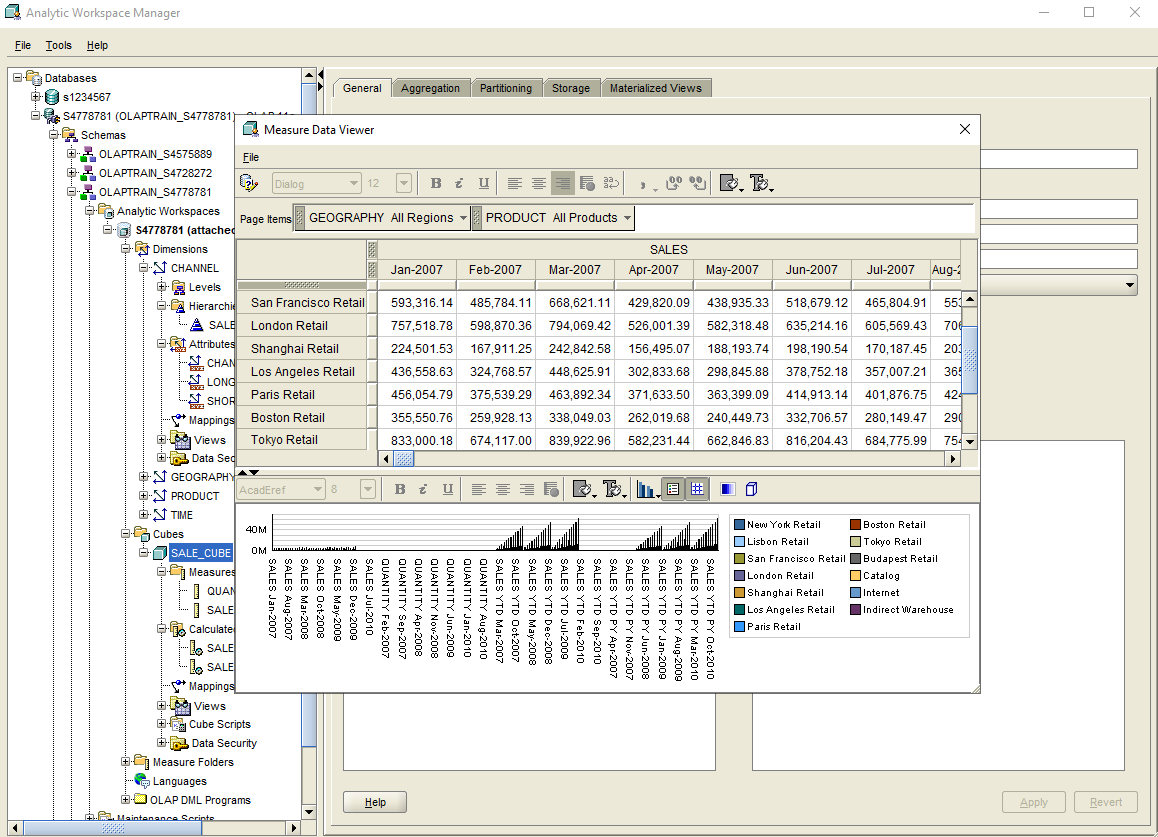
After:



b/ Drill-down: I do the drill-down process to change the view from Annual to Monthly in dimension Time.

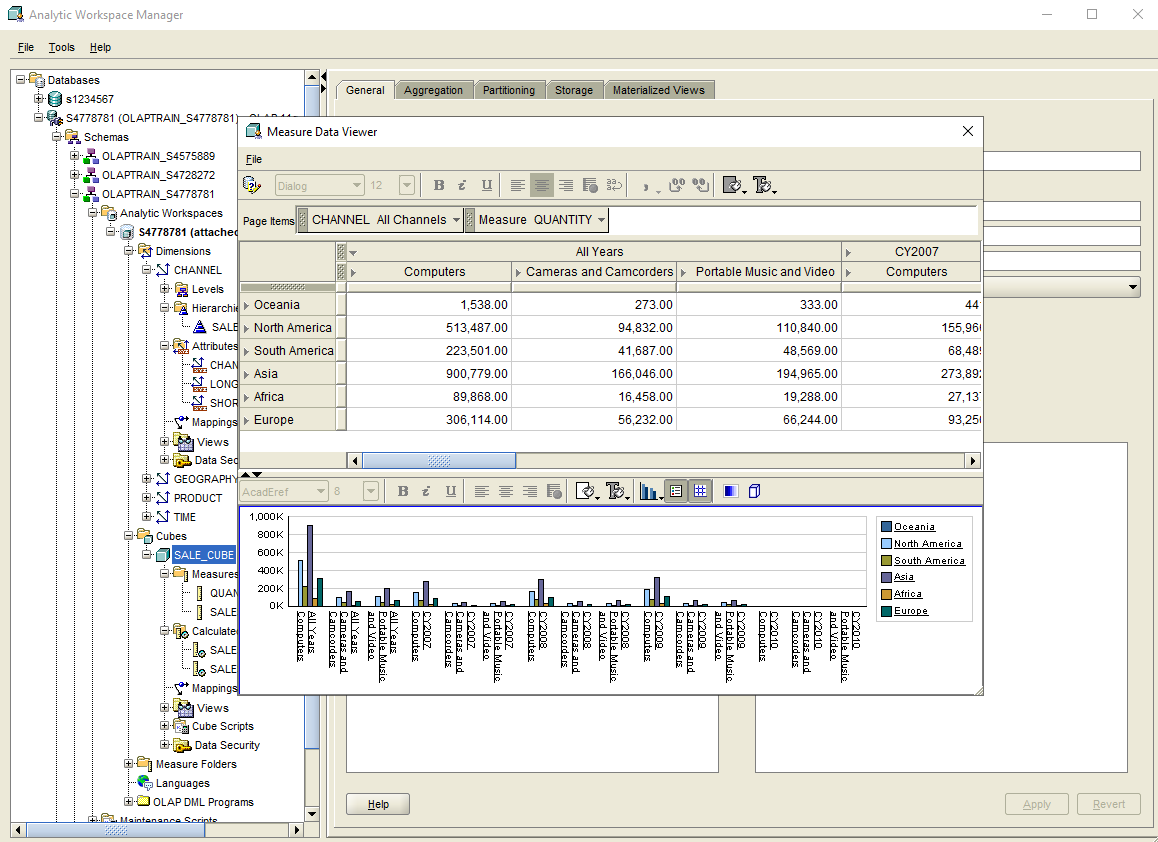
Before (Annual):



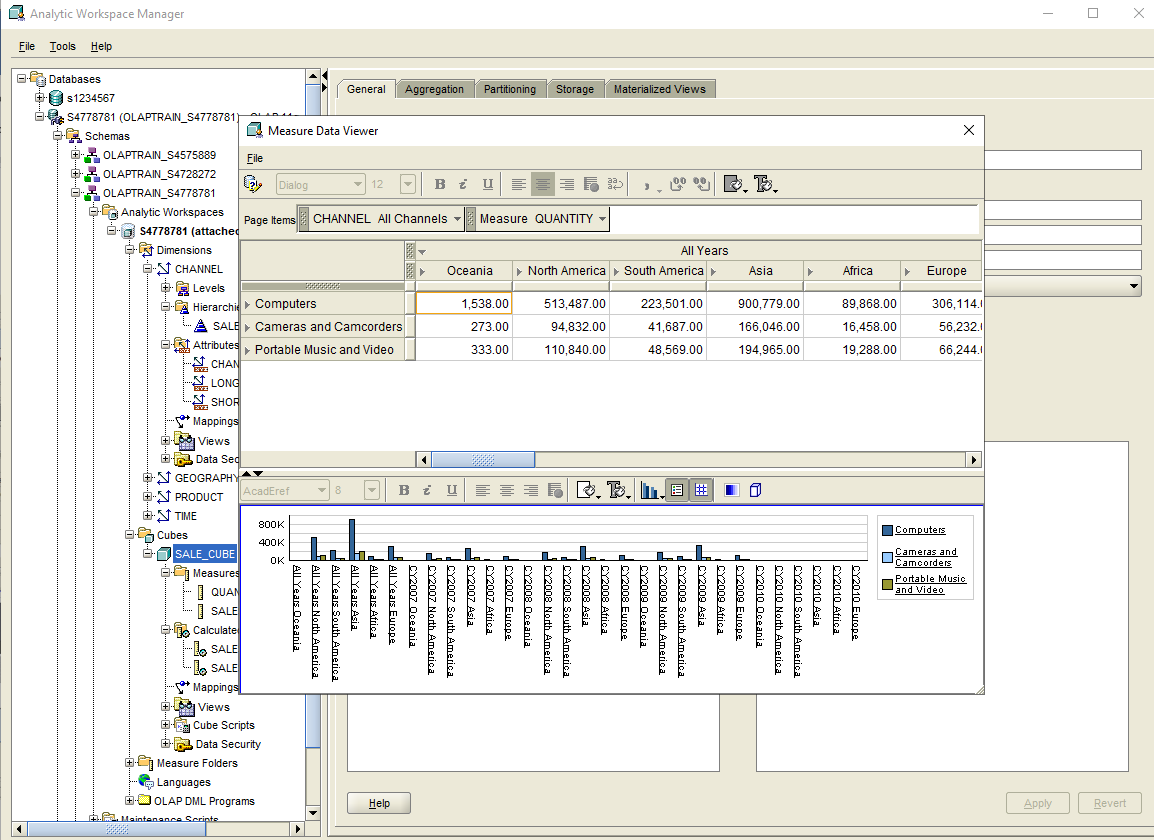
After (Monthly):

a/ Pivot: I do the pivot operation to swap the Product and Geography positions (swap columns and rows). The position of the Time dimension will not change.

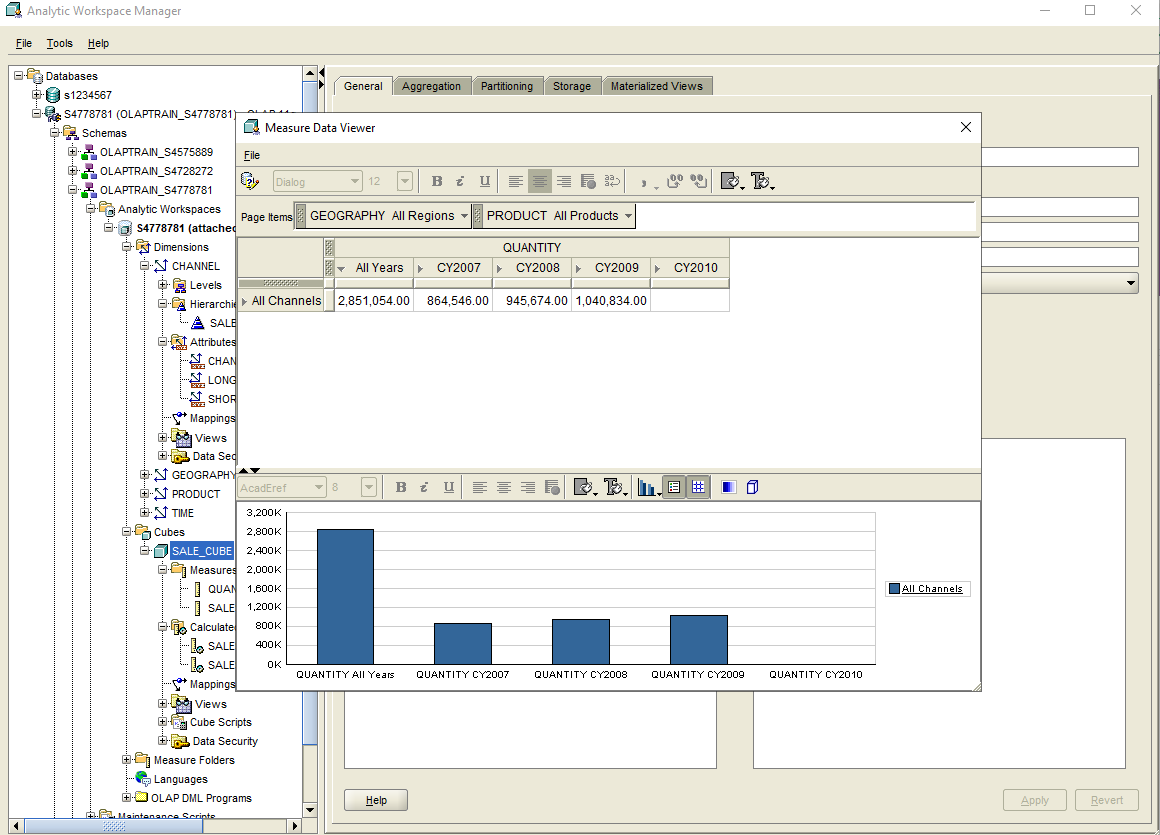
Before:

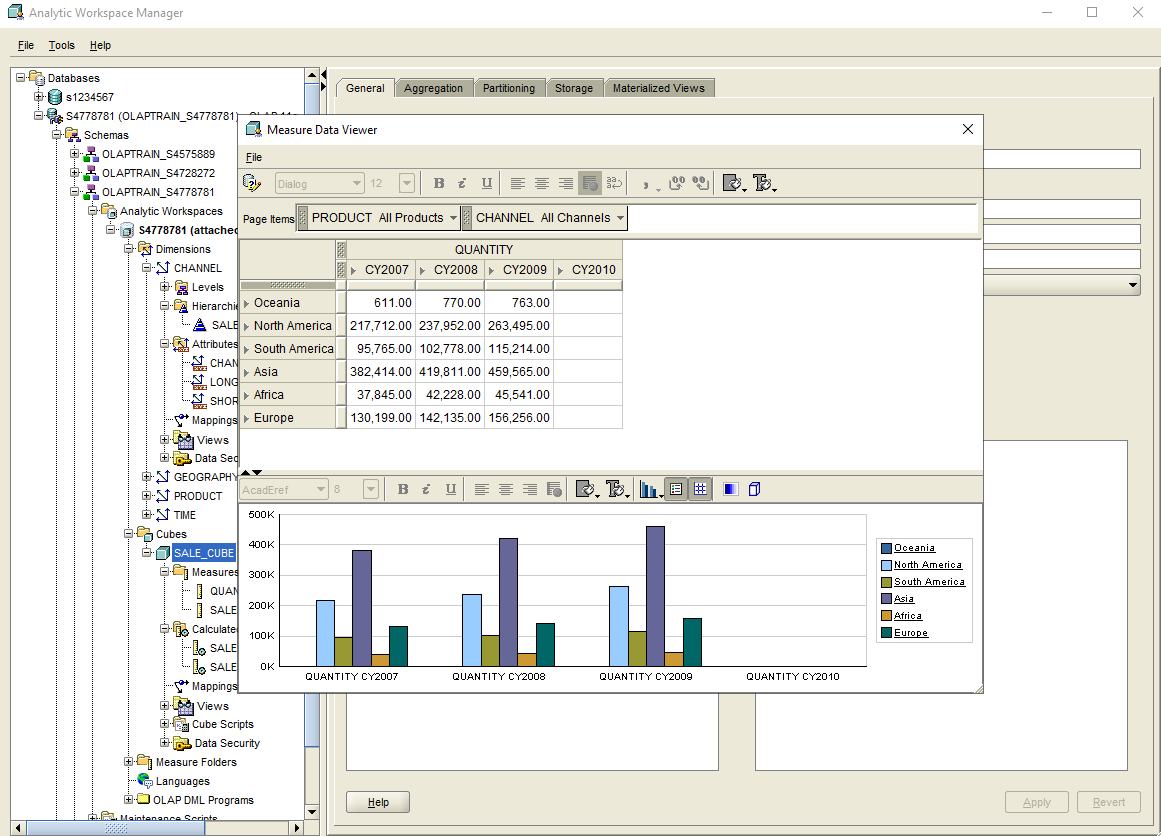


After:

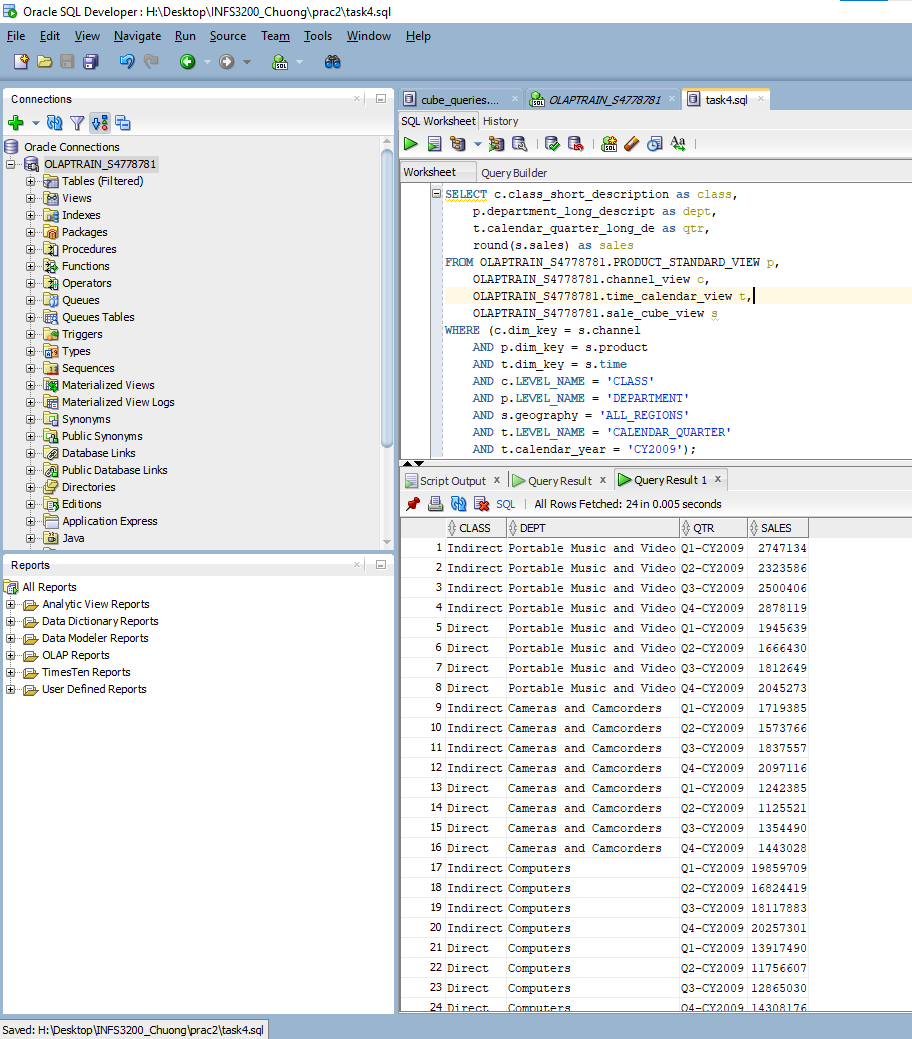


**2/** Adjust your Data Viewer window until it is identical (the value can be different) to the following two views (Hint: your viewer windows must be identical to get full mark and you may need help from the Query Builder, shown below). Take a screenshot for each view you made and put them in your document.





***Task 4:***



Query:

SELECT c.class\_short\_description as class,

p.department\_long\_descript as dept,

t.calendar\_quarter\_long\_de as qtr,

round(s.sales) as sales

FROM OLAPTRAIN\_S4778781.PRODUCT\_STANDARD\_VIEW p,

OLAPTRAIN\_S4778781.channel\_view c,

OLAPTRAIN\_S4778781.time\_calendar\_view t,

OLAPTRAIN\_S4778781.sale\_cube\_view s

WHERE (c.dim\_key = s.channel

AND p.dim\_key = s.product

AND t.dim\_key = s.time

AND c.LEVEL\_NAME = 'CLASS'

AND p.LEVEL\_NAME = 'DEPARTMENT'

AND s.geography = 'ALL\_REGIONS'

AND t.LEVEL\_NAME = 'CALENDAR\_QUARTER'

AND t.calendar\_year = 'CY2009');