Course 5 (Capstone)

Week 4 assignment

Part2

--AQ1: Cumulative quantity for locations

select W\_LOCATION\_D.location\_Id

,W\_LOCATION\_D.location\_name

,W\_SALES\_CLASS\_D.sales\_class\_ID

,W\_SALES\_CLASS\_D.sales\_class\_desc

,W\_TIME\_D.time\_year

,W\_TIME\_D.time\_month

,W\_SALES\_CLASS\_D.base\_price

,sum(W\_JOB\_F.QUANTITY\_ORDERED) as Sum\_Qty\_Ord

,sum(W\_JOB\_F.QUOTE\_QTY)as sum\_amount

,SUM(SUM(W\_JOB\_F.QUOTE\_QTY)) OVER (PARTITION BY W\_LOCATION\_D.location\_Id,W\_TIME\_D.time\_year

ORDER BY Time\_Year

ROWS UNBOUNDED PRECEDING ) AS CumSumAmount

from w\_JOB\_F,w\_location\_D,w\_sales\_class\_D,W\_TIME\_D

where w\_location\_d.location\_id = w\_job\_f.location\_id

and W\_SALES\_CLASS\_D.SALES\_CLASS\_ID = w\_job\_f.SALES\_CLASS\_ID

and W\_TIME\_D.time\_ID =CONTRACT\_DATE

Group by W\_LOCATION\_D.location\_Id

,W\_LOCATION\_D.location\_name

,W\_SALES\_CLASS\_D.sales\_class\_ID

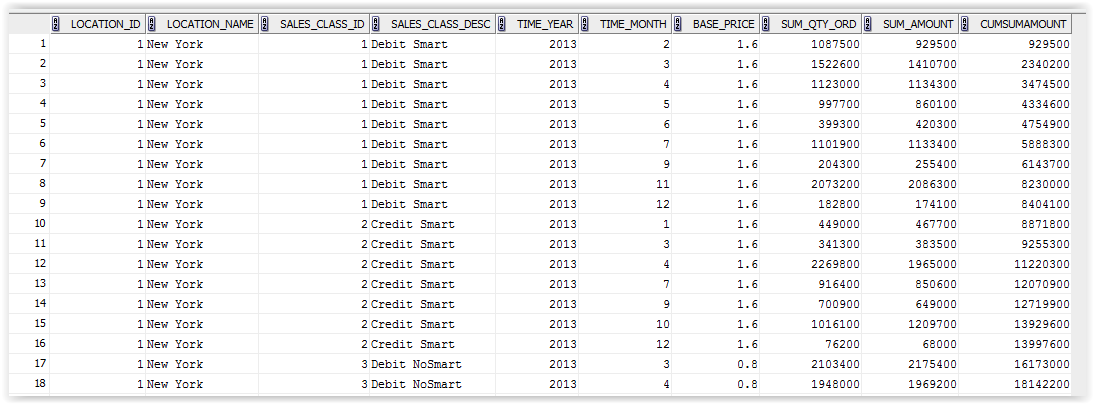
,W\_SALES\_CLASS\_D.sales\_class\_desc

,W\_TIME\_D.time\_year

,W\_TIME\_D.time\_month

,W\_SALES\_CLASS\_D.base\_price

order by W\_TIME\_D.time\_year;



--AQ2: Moving average of average amount ordered for locations

select W\_LOCATION\_D.location\_Id

,W\_LOCATION\_D.location\_name

,W\_SALES\_CLASS\_D.sales\_class\_ID

,W\_SALES\_CLASS\_D.sales\_class\_desc

,W\_TIME\_D.time\_year

,W\_TIME\_D.time\_month

,W\_SALES\_CLASS\_D.base\_price

,sum(W\_JOB\_F.QUANTITY\_ORDERED) as Sum\_Qty\_Ord

,sum(W\_JOB\_F.QUOTE\_QTY)as sum\_amount

,SUM(SUM(W\_JOB\_F.QUOTE\_QTY)) OVER (PARTITION BY W\_LOCATION\_D.location\_Id,W\_TIME\_D.time\_year

ORDER BY Time\_Year

ROWS BETWEEN 11 PRECEDING AND current row ) AS CumSumAmount

from w\_JOB\_F,w\_location\_D,w\_sales\_class\_D,W\_TIME\_D

where w\_location\_d.location\_id = w\_job\_f.location\_id

and W\_SALES\_CLASS\_D.SALES\_CLASS\_ID = w\_job\_f.SALES\_CLASS\_ID

and W\_TIME\_D.time\_ID =CONTRACT\_DATE

Group by W\_LOCATION\_D.location\_Id

,W\_LOCATION\_D.location\_name

,W\_SALES\_CLASS\_D.sales\_class\_ID

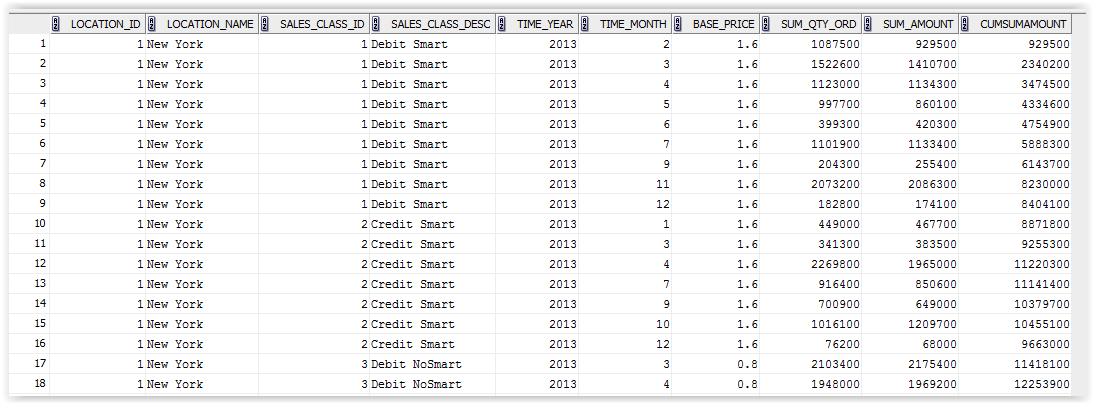
,W\_SALES\_CLASS\_D.sales\_class\_desc

,W\_TIME\_D.time\_year

,W\_TIME\_D.time\_month

,W\_SALES\_CLASS\_D.base\_price

order by W\_TIME\_D.time\_year;



--AQ3: Rank locations by descending sum of annual profit

select BQ2.location\_name

,BQ2.time\_year

--,BQ2.time\_month

,Sum\_Invoice\_Qty

,SumTotalCost

,sum(Sum\_Invoice\_Qty-SumTotalCost) as Profit

,RANK() OVER (PARTITION BY BQ2.time\_year ORDER BY BQ2.time\_year,sum(Sum\_Invoice\_Qty-SumTotalCost) DESC) AS Rank\_Profit

from BQ2, BQ3

where BQ2.Location\_ID=BQ3.Location\_ID

Group by

BQ2.location\_name

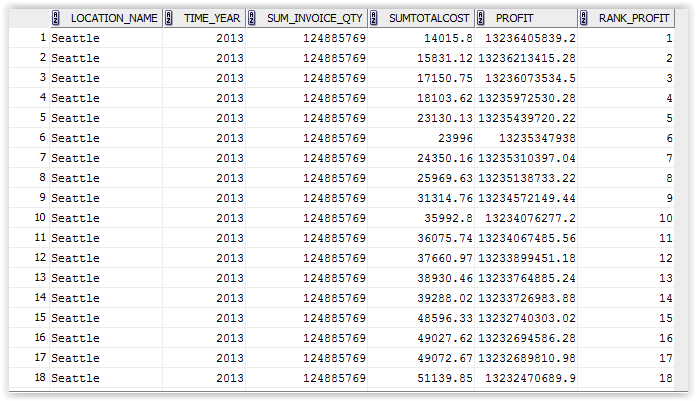
,BQ2.time\_year

--,BQ2.time\_month

,Sum\_Invoice\_Qty

,SumTotalCost

;



--AQ4: Rank locations by descending annual profit margin

select BQ2.location\_name

,BQ2.time\_year

--,BQ2.time\_month

,Sum\_Invoice\_Qty

,SumTotalCost

,sum((Sum\_Invoice\_Qty-SumTotalCost)/SumTotalCost) as Profit\_margin

,RANK() OVER (PARTITION BY BQ2.time\_year ORDER BY sum((Sum\_Invoice\_Qty-SumTotalCost)/SumTotalCost) DESC) AS Rank\_Profit

from BQ2, BQ3

where BQ2.Location\_ID=BQ3.Location\_ID

Group by

BQ2.location\_name

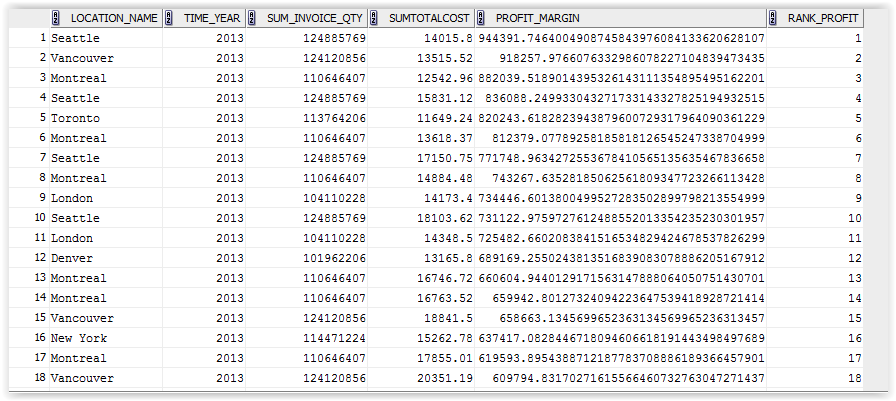
,BQ2.time\_year

--,BQ2.time\_month

,Sum\_Invoice\_Qty

,SumTotalCost

;



--AQ5: Percent rank of job profit margins for locations

drop view AQ5;

create view AQ5 as

select BQ2.Job\_ID

,BQ2.location\_name

,BQ2.time\_year

,BQ2.time\_month

,Sum\_Invoice\_Qty

,SumTotalCost

,sum((Sum\_Invoice\_Qty-SumTotalCost)/SumTotalCost) as Profit\_margin

,RANK() OVER (ORDER BY sum((Sum\_Invoice\_Qty-SumTotalCost)/SumTotalCost) DESC) AS Rank\_Profit

from BQ2, BQ3

where BQ2.Location\_ID=BQ3.Location\_ID

Group by

BQ2.Job\_ID

,BQ2.location\_name

,BQ2.time\_year

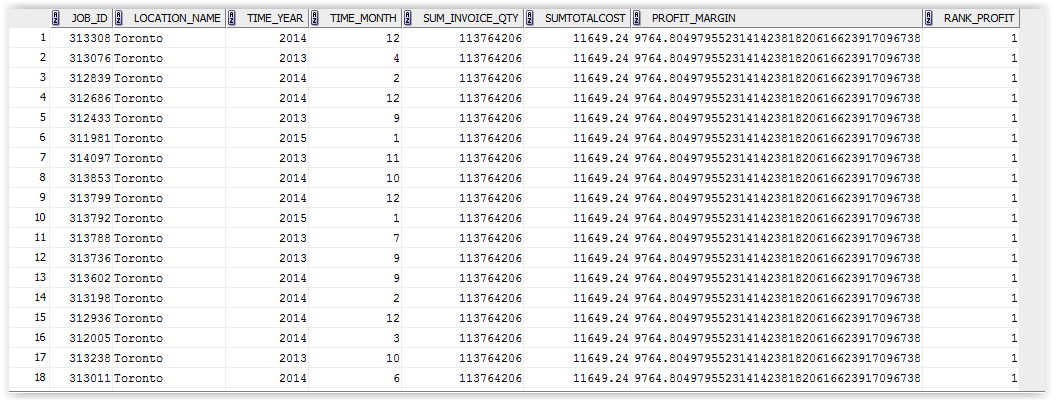
,BQ2.time\_month

,Sum\_Invoice\_Qty

,SumTotalCost

;

select \* from AQ5;



--AQ6: Top performers of percent rank of job profit margins for locations

select Job\_ID

,location\_name

,time\_year

,time\_month

,Profit\_margin

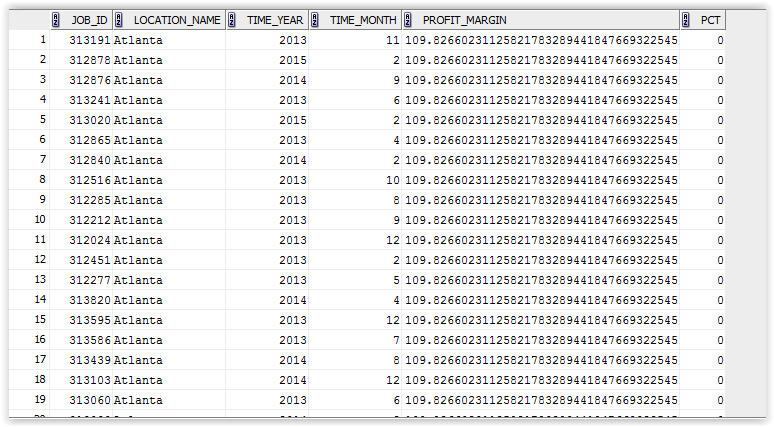
,PERCENT\_RANK()

OVER (ORDER BY Profit\_margin) As pct

from AQ5

--WHERE pct >= 0.95

;



--AQ7: Rank sales class by return quantities for each year

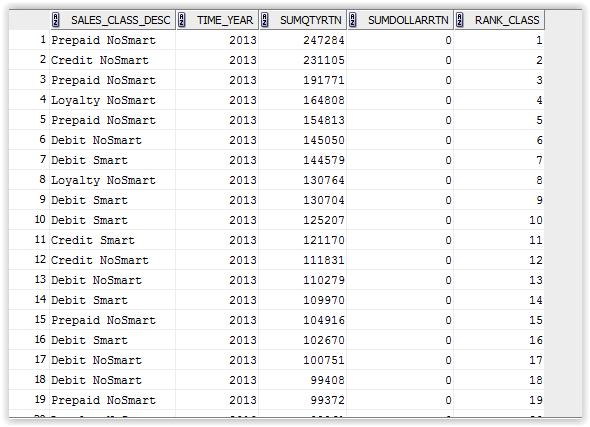
Select SALES\_CLASS\_DESC

,TIME\_YEAR

,SumQtyRtn

,SumDollarRtn

,RANK() OVER (partition by TIME\_YEAR ORDER BY SumQtyRtn DESC) AS Rank\_Class

from BQ4; 

--AQ8: Ratio to report of return quantities for sales classes by year

Select SALES\_CLASS\_DESC

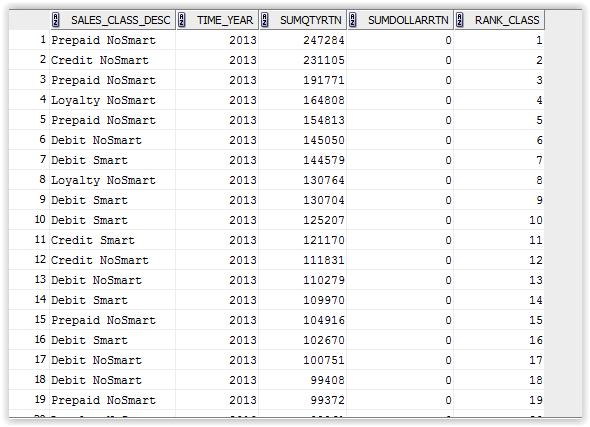
,TIME\_YEAR

,SumQtyRtn

,SumDollarRtn

,RANK() OVER ( ORDER BY TIME\_YEAR,SumQtyRtn DESC) AS Rank\_Class

from BQ4;



--AQ9: Rank locations by sum of business days delayed for the job shipped by date (first shipment)

Select LOCATION\_NAME

,W\_TIME\_D.TIME\_YEAR

--, sum(BusDaysOff) as sum\_delay\_Days

,BusDaysOff

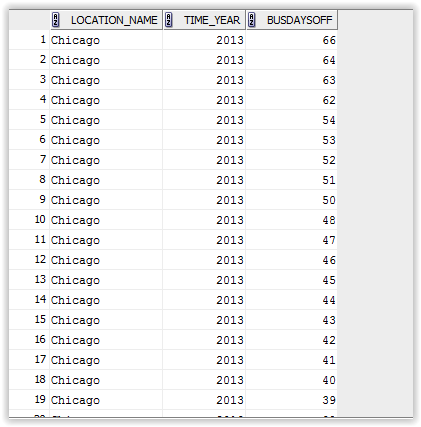
--,RANK() OVER (ORDER BY BusDaysOff DESC) AS Rank\_Delay

from BQ6,W\_TIME\_D

Where W\_TIME\_D.TIME\_ID = DATE\_SHIP\_BY

--Group by

--rollup (LOCATION\_NAME,W\_TIME\_D.TIME\_YEAR) ,BusDaysOff

; 

--AQ10: Rank locations by delay rate for jobs delayed on the last shipment date

Select LOCATION\_NAME

, DATE\_PROMISED

, Last\_Shipment\_Date

,QUANTITY\_ORDERED

--, count(LOCATION\_NAME) as delayed\_Jobs

--, sum(BusDaysOff) as sum\_delay

, BusDaysOff

from BQ5;

--group by rollup(LOCATION\_NAME, DATE\_PROMISED), Last\_Shipment\_Date,QUANTITY\_ORDERED

--, BusDaysOff

group by LOCATION\_NAME

, DATE\_PROMISED

, Last\_Shipment\_Date

,QUANTITY\_ORDERED

;

