**Case Study 3**

Query 1:

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\_Sales\_Class\_D.base\_price,w\_time\_d.time\_year,w\_time\_d.time\_month,SUM(w\_job\_f.quantity\_ordered) Sumqtyordered, SUM(W\_job\_f.quantity\_ordered \* w\_job\_f.unit\_price) totaljobamounts

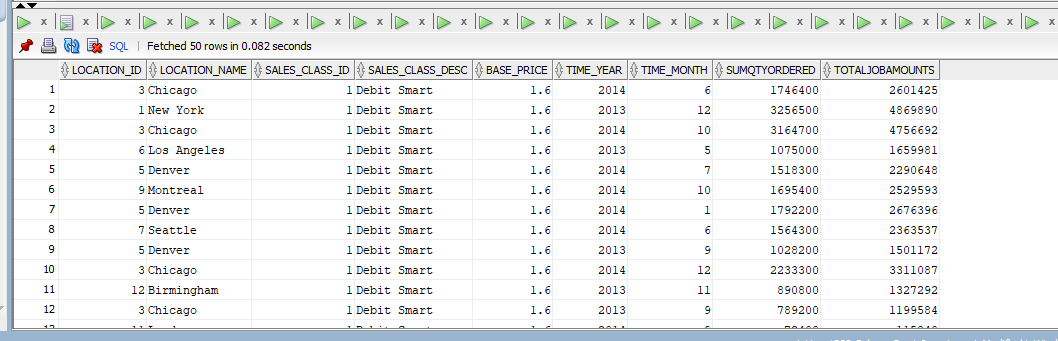
from w\_job\_f, w\_location\_d, w\_time\_d, w\_sales\_class\_d

where w\_job\_f.sales\_class\_id = w\_sales\_class\_d.sales\_class\_id

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

and w\_job\_f.contract\_date = w\_time\_d.time\_id

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\_Sales\_Class\_D.base\_price,w\_time\_d.time\_year,w\_time\_d.time\_month;



Query 2:

create view basequery2 as

select w\_job\_f.job\_id, w\_location\_d.location\_id, w\_location\_d.location\_name, w\_job\_f.unit\_price, w\_job\_f.quantity\_ordered, w\_time\_d.time\_year, w\_time\_d.time\_month, SUM(w\_invoiceline\_f.invoice\_amount) totalinvoiceamount, SUM(w\_invoiceline\_f.invoice\_quantity) totalinvoicequantity

from w\_location\_d, w\_invoiceline\_f, w\_time\_d, w\_job\_f, w\_sub\_job\_f, w\_job\_shipment\_f

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

and w\_invoiceline\_f.location\_id = w\_location\_d.location\_id

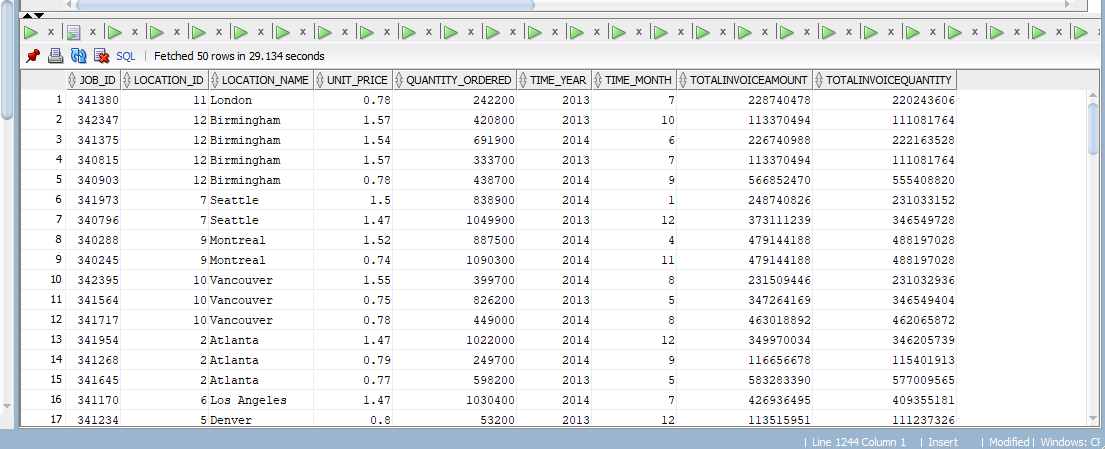
and w\_sub\_job\_f.job\_id = w\_job\_f.job\_id

and w\_job\_shipment\_f.invoice\_id = w\_invoiceline\_f.invoice\_id

and w\_job\_f.contract\_date = w\_time\_d.time\_id

group by w\_job\_f.job\_id, w\_location\_d.location\_id, w\_location\_d.location\_name, w\_job\_f.unit\_price, w\_job\_f.quantity\_ordered, w\_time\_d.time\_year, w\_time\_d.time\_month;

select \* from basequery2;



Query 3:

create view basequer3 as

select w\_job\_f.job\_id, w\_location\_d.location\_id, w\_location\_d.location\_name, w\_time\_d.time\_year, w\_time\_d.time\_month,SUM(w\_sub\_job\_f.cost\_labor) laborcost, SUM(w\_sub\_job\_f.cost\_material) materia1cost, SUM(w\_sub\_job\_f.cost\_overhead) as ohcost, SUM(w\_sub\_job\_f.machine\_hours \* w\_machine\_type\_d.rate\_per\_hour) machinecost, SUM(w\_sub\_job\_f.cost\_labor + w\_sub\_job\_f.cost\_material + w\_sub\_job\_f.cost\_overhead) as totalcost, SUM(w\_sub\_job\_f.quantity\_produced) as totalquantity, SUM(w\_sub\_job\_f.cost\_labor + w\_sub\_job\_f.cost\_material + w\_sub\_job\_f.cost\_overhead) / SUM(w\_sub\_job\_f.quantity\_produced) unitcost

from w\_job\_f, w\_location\_d, w\_time\_d, w\_sub\_job\_f, w\_machine\_type\_d

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

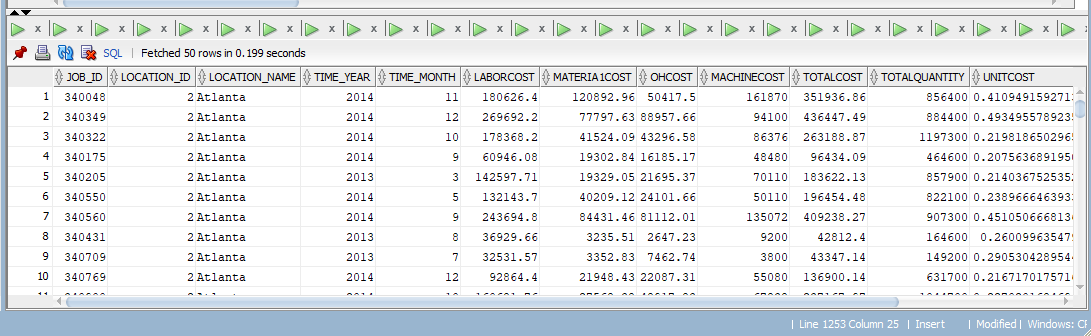
and w\_sub\_job\_f.job\_id = w\_job\_f.job\_id

and w\_job\_f.contract\_date = w\_time\_d.time\_id

and w\_machine\_type\_d.machine\_type\_id = w\_sub\_job\_f.machine\_type\_id

group by w\_job\_f.job\_id, w\_location\_d.location\_id, w\_location\_d.location\_name, w\_time\_d.time\_year, w\_time\_d.time\_month;

select \* from basequer3;



Query 4:

create view basequery4 as

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, SUM(w\_invoiceline\_f.quantity\_shipped - w\_invoiceline\_f.invoice\_quantity) returnquantity, SUM((w\_invoiceline\_f.invoice\_amount/w\_invoiceline\_f.invoice\_quantity)\*(w\_invoiceline\_f.quantity\_shipped - w\_invoiceline\_f.invoice\_quantity)) amonutreturned

from w\_location\_d, w\_sales\_class\_d, w\_time\_d, w\_invoiceline\_f

where w\_invoiceline\_f.invoice\_sent\_date = w\_time\_d.time\_id

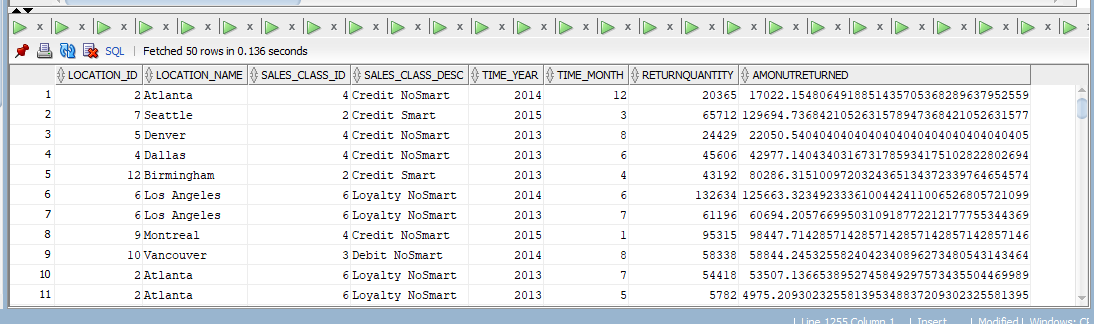
and w\_invoiceline\_f.quantity\_shipped > w\_invoiceline\_f.invoice\_quantity

and w\_invoiceline\_f.location\_id = w\_location\_d.location\_id

and w\_invoiceline\_f.sales\_class\_id = w\_sales\_class\_d.sales\_class\_id

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;

select \* from basequery4;



Query 5:

create view basequery5 as

select w\_job\_f.job\_id, 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\_job\_f.date\_promised, x1.last\_shipment\_date, x1.sumdelayshipqty, w\_job\_f.quantity\_ordered, GetBusDaysDiff(W\_JOB\_F.date\_promised, X1.Last\_Shipment\_Date) AS BusDaysDiff

from w\_job\_f, w\_location\_d, w\_sales\_class\_d,

( select w\_sub\_job\_f.job\_id,

max(actual\_ship\_date) as last\_shipment\_date,

sum ( actual\_quantity ) as sumdelayshipqty

from w\_job\_shipment\_f, w\_sub\_job\_f, w\_job\_f

where w\_sub\_job\_f.sub\_job\_id = w\_job\_shipment\_f.sub\_job\_id

and w\_job\_f.job\_id = w\_sub\_job\_f.job\_id

and actual\_ship\_date > date\_promised

group by w\_sub\_job\_f.job\_id

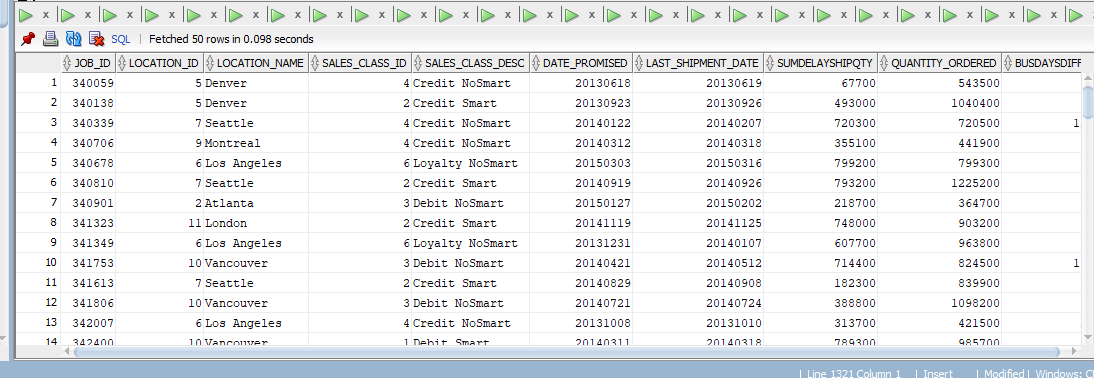
) x1

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

and w\_job\_f.sales\_class\_id = w\_sales\_class\_d.sales\_class\_id

and x1.job\_id = w\_job\_f.job\_id;

select \* from basequery5;



Query 6:

create view basequery6 as

select w\_job\_f.job\_id, 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\_job\_f.date\_ship\_by, x1.firstshipdate firstshipdate, getbusdaysdiff( x1.firstshipdate, w\_job\_f.date\_ship\_by) datedifference

from

( select w\_sub\_job\_f.job\_id, min(actual\_ship\_date) as firstshipdate

from w\_job\_shipment\_f, w\_sub\_job\_f

where w\_sub\_job\_f.sub\_job\_id = w\_job\_shipment\_f.sub\_job\_id

group by w\_sub\_job\_f.job\_id

) x1,

w\_job\_f, w\_location\_d, w\_sales\_class\_d

where

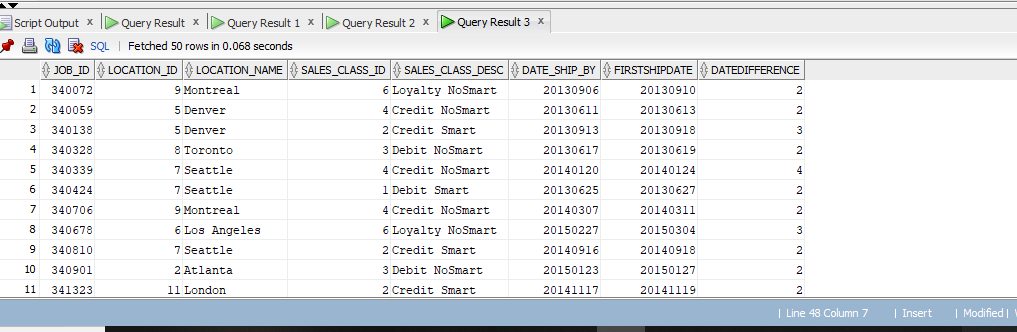
w\_job\_f.location\_id = w\_location\_d.location\_id

and w\_job\_f.sales\_class\_id = w\_sales\_class\_d.sales\_class\_id

and x1.firstshipdate > w\_job\_f.date\_ship\_by

and x1.job\_id = w\_job\_f.job\_id;

select \* from basequery6;



Query A1:

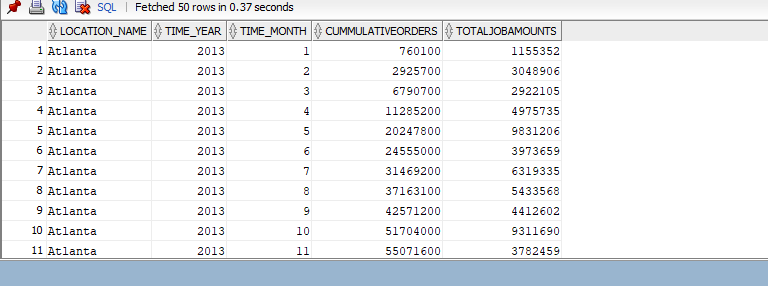
select w\_location\_d.location\_name, w\_time\_d.time\_year, w\_time\_d.time\_month, SUM(SUM(w\_job\_f.quantity\_ordered)) over (partition by w\_location\_d.location\_name, w\_time\_d.time\_year order by w\_time\_d.time\_month rows unbounded preceding) cummulativeorders, SUM(w\_job\_f.quantity\_ordered \* w\_job\_f.unit\_price) totaljobamounts

from w\_location\_d, w\_time\_d, w\_job\_f

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

and w\_job\_f.contract\_date = w\_time\_d.time\_id

group by w\_location\_d.location\_name, w\_time\_d.time\_year, w\_time\_d.time\_month;



Query A2:

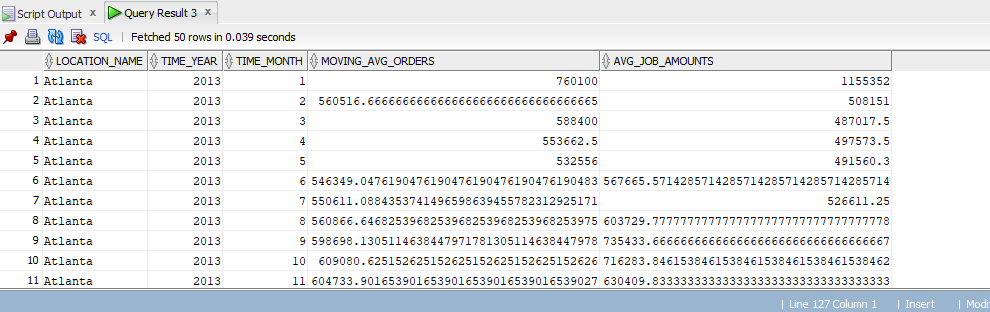
select w\_location\_d.location\_name, w\_time\_d.time\_year, w\_time\_d.time\_month, AVG(AVG(w\_job\_f.quantity\_ordered)) over (partition by w\_location\_d.location\_name order by w\_time\_d.time\_year, w\_time\_d.time\_month rows between 11 preceding and 0 following) moving\_avg\_orders, AVG(w\_job\_f.quantity\_ordered \* w\_job\_f.unit\_price) avg\_job\_amounts

from w\_location\_d, w\_time\_d, w\_job\_f

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

and w\_job\_f.contract\_date = w\_time\_d.time\_id

group by w\_location\_d.location\_name, w\_time\_d.time\_year, w\_time\_d.time\_month;



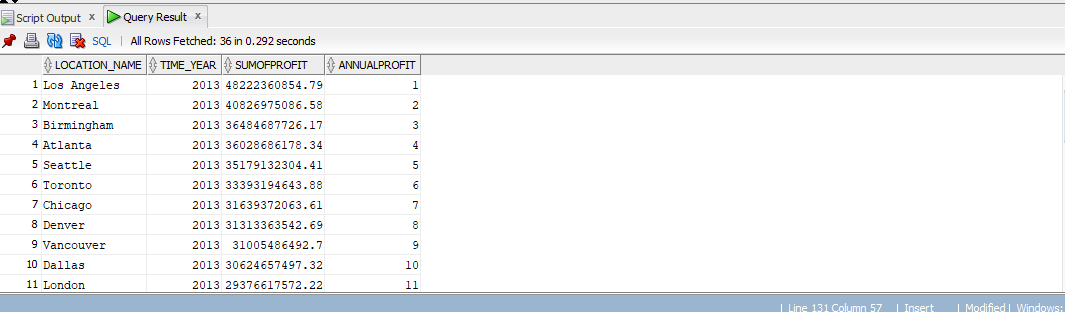
Query A3:

select basequery2.location\_name, basequery2.time\_year, SUM(basequery2.totalinvoiceamount - basequer3.totalcost) sumofprofit, rank() over (partition by basequery2.time\_year order by (SUM(basequery2.totalinvoiceamount - basequer3.totalcost)) desc) annualprofit

from basequery2, basequer3

where basequery2.job\_id = basequer3.job\_id

group by basequery2.location\_name, basequery2.time\_year;



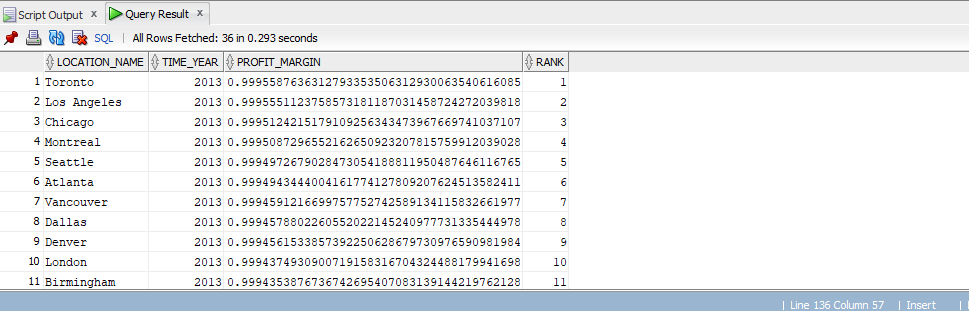
Query A4:

select basequery2.location\_name, basequery2.time\_year, SUM(basequery2.totalinvoiceamount - basequer3.totalcost) / SUM(basequery2.totalinvoiceamount) profit\_margin, rank() over (partition by basequery2.time\_year order by (SUM(basequery2.totalinvoiceamount - basequer3.totalcost) / SUM(basequery2.totalinvoiceamount)) desc) rank

from basequery2, basequer3

where basequery2.job\_id = basequer3.job\_id

group by basequery2.location\_name, basequery2.time\_year;



Query A5:

select basequery2.job\_id, basequery2.location\_name, basequery2.time\_year, basequery2.time\_month, SUM(basequery2.totalinvoiceamount - basequer3.totalcost) / SUM(basequery2.totalinvoiceamount) profit\_margin,

percent\_rank() over (order by (SUM(basequery2.totalinvoiceamount - basequer3.totalcost) / SUM(basequery2.totalinvoiceamount) )desc) percentrank

from basequery2, basequer3

where basequery2.job\_id = basequer3.job\_id

group by basequery2.job\_id, basequery2.location\_name, basequery2.time\_year, basequery2.time\_month;

Query A6:

select basequery2.job\_id, basequery2.location\_name, basequery2.time\_year, basequery2.time\_month, SUM(basequery2.totalinvoiceamount - basequer3.totalcost) / SUM(basequery2.totalinvoiceamount) profit\_margin, percent\_rank() over (order by (SUM(basequery2.totalinvoiceamount - basequer3.totalcost) / SUM(basequery2.totalinvoiceamount)) desc) percent\_rank

from basequery2, basequer3,

(select basequery2.job\_id, basequery2.location\_name, basequery2.time\_year, basequery2.time\_month, SUM(basequery2.totalinvoiceamount - basequer3.totalcost) / SUM(basequery2.totalinvoiceamount) profit\_margin,

percent\_rank() over (order by (SUM(basequery2.totalinvoiceamount - basequer3.totalcost) / SUM(basequery2.totalinvoiceamount)) desc) percent\_rank

from basequery2, basequer3

where basequery2.job\_id = basequer3.job\_id

group by basequery2.job\_id, basequery2.location\_name, basequery2.time\_year, basequery2.time\_month

)

where percent\_rank < 0.05

group by basequery2.job\_id, basequery2.location\_name, basequery2.time\_year, basequery2.time\_month;

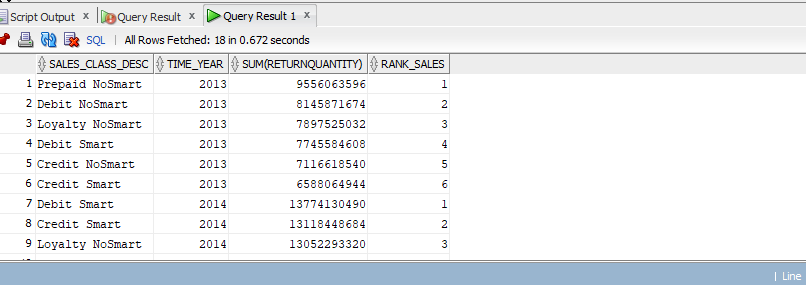
Query A7:

select basequery4.sales\_class\_desc, basequery4.time\_year, SUM(returnquantity), rank() over(partition by basequery4.time\_year order by SUM(returnquantity) desc) rank\_sales

from basequery4,w\_invoiceline\_f

where w\_invoiceline\_f.quantity\_shipped > w\_invoiceline\_f.invoice\_quantity

group by basequery4.sales\_class\_desc, basequery4.time\_year;



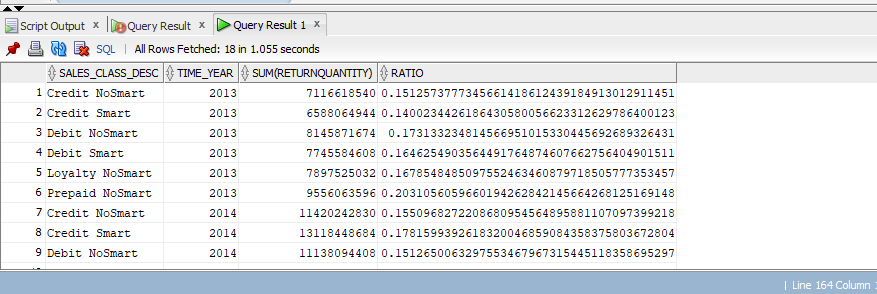
Query A8:

select basequery4.sales\_class\_desc, basequery4.time\_year, SUM(returnquantity), ratio\_to\_report(SUM(returnquantity)) over (partition by basequery4.time\_year) ratio

from basequery4,w\_invoiceline\_f

where w\_invoiceline\_f.quantity\_shipped > w\_invoiceline\_f.invoice\_quantity

group by basequery4.sales\_class\_desc, basequery4.time\_year;



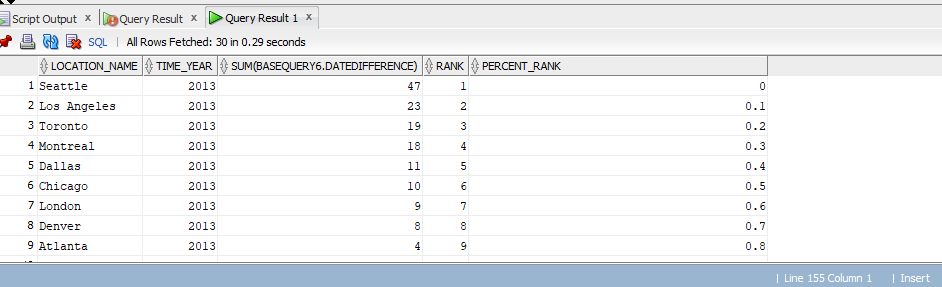
Query A9:

select basequery6.location\_name, w\_time\_d.time\_year, SUM(basequery6.datedifference), rank() over(partition by w\_time\_d.time\_year order by SUM(basequery6.datedifference)desc) rank, percent\_rank() over(partition by w\_time\_d.time\_year order by SUM(basequery6.datedifference) desc) percent\_rank

from basequery6, w\_time\_d

where basequery6.date\_ship\_by = w\_time\_d.time\_id

group by basequery6.location\_name, w\_time\_d.time\_year;



Query A10:

select basequery5.location\_name, w\_time\_d.time\_year, count(\*) totaljobs, SUM(quantity\_ordered - sumdelayshipqty)/SUM(quantity\_ordered),

rank() over ( partition by w\_time\_d.time\_year order by SUM(quantity\_ordered - sumdelayshipqty)/SUM(quantity\_ordered)desc) rankdelay

from basequery5, w\_time\_d

where w\_time\_d.time\_id = basequery5.date\_promised

group by basequery5.location\_name, w\_time\_d.time\_year;

