**COURSE 3 MODULE 2 SOLUTIONS**

1)

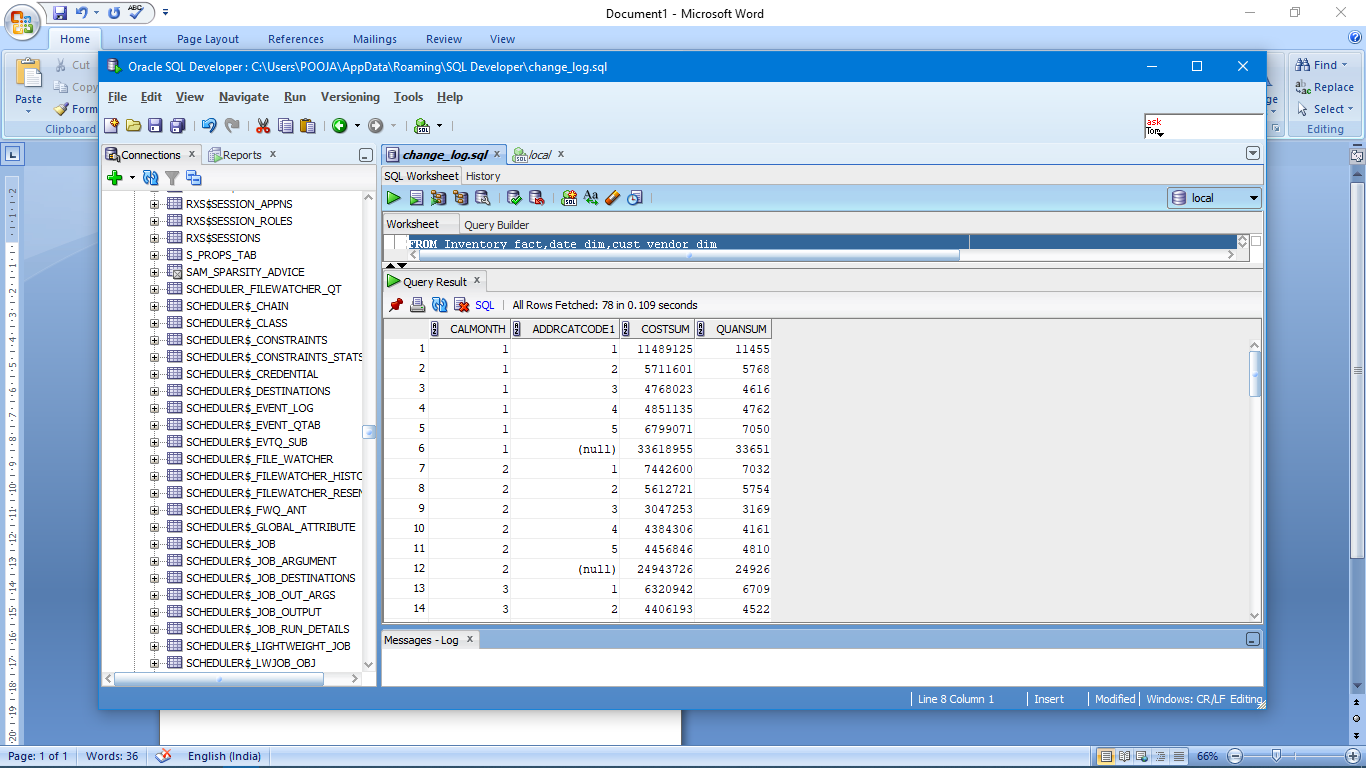
SELECT CalMonth,AddrCatCode1,SUM(ExtCost) AS CostSum,SUM(Quantity) AS QuanSum

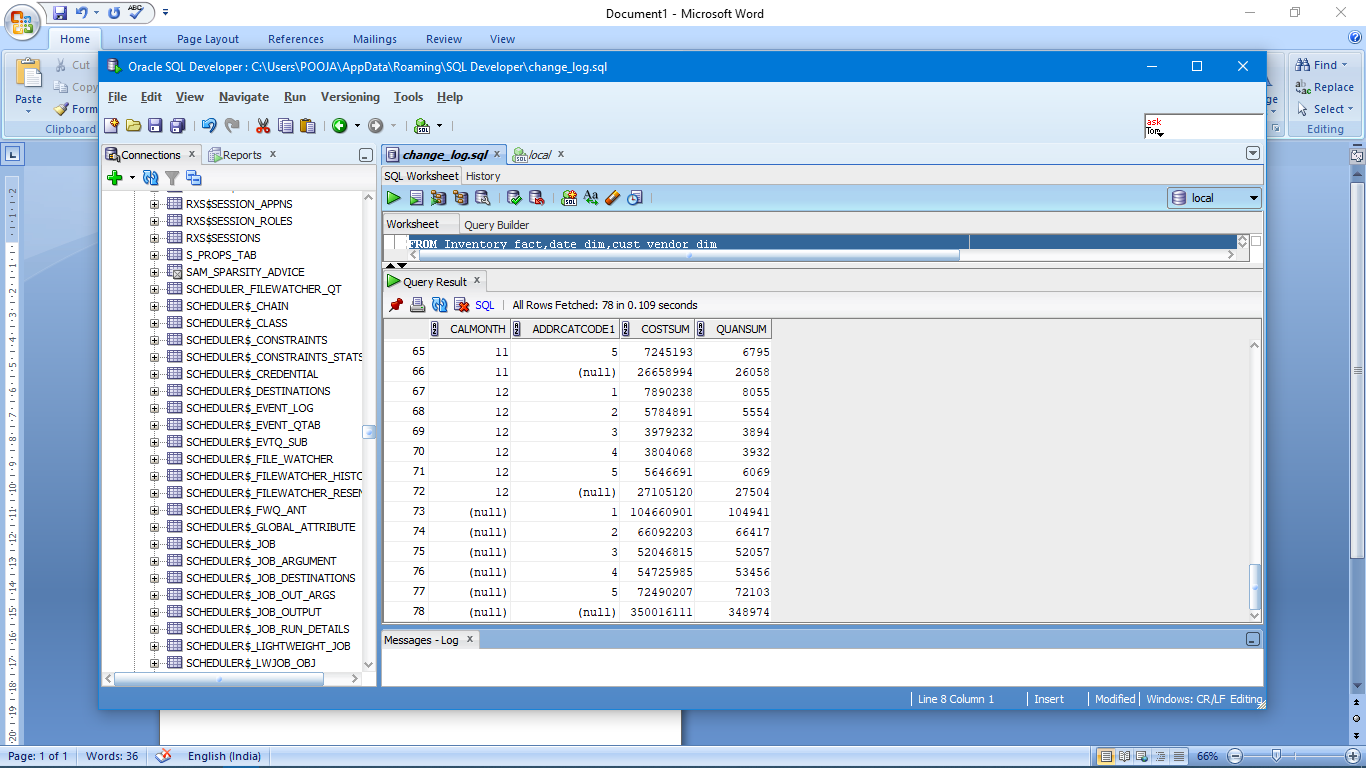
FROM Inventory\_fact,date\_dim,cust\_vendor\_dim

WHERE Inventory\_fact.DateKey = date\_dim.DateKey AND Inventory\_fact.CustVendorKey = cust\_vendor\_dim.CustVendorKey AND Inventory\_fact.TransTypeKey = 5 AND date\_dim.CalYear = 2011

GROUP BY CUBE(CalMonth,AddrCatCode1)

ORDER BY CalMonth,AddrCatCode1;





2)

SELECT CalQuarter,Zip,Name,SUM(ExtCost) AS CostSum,Count(\*) AS INVCOUNT

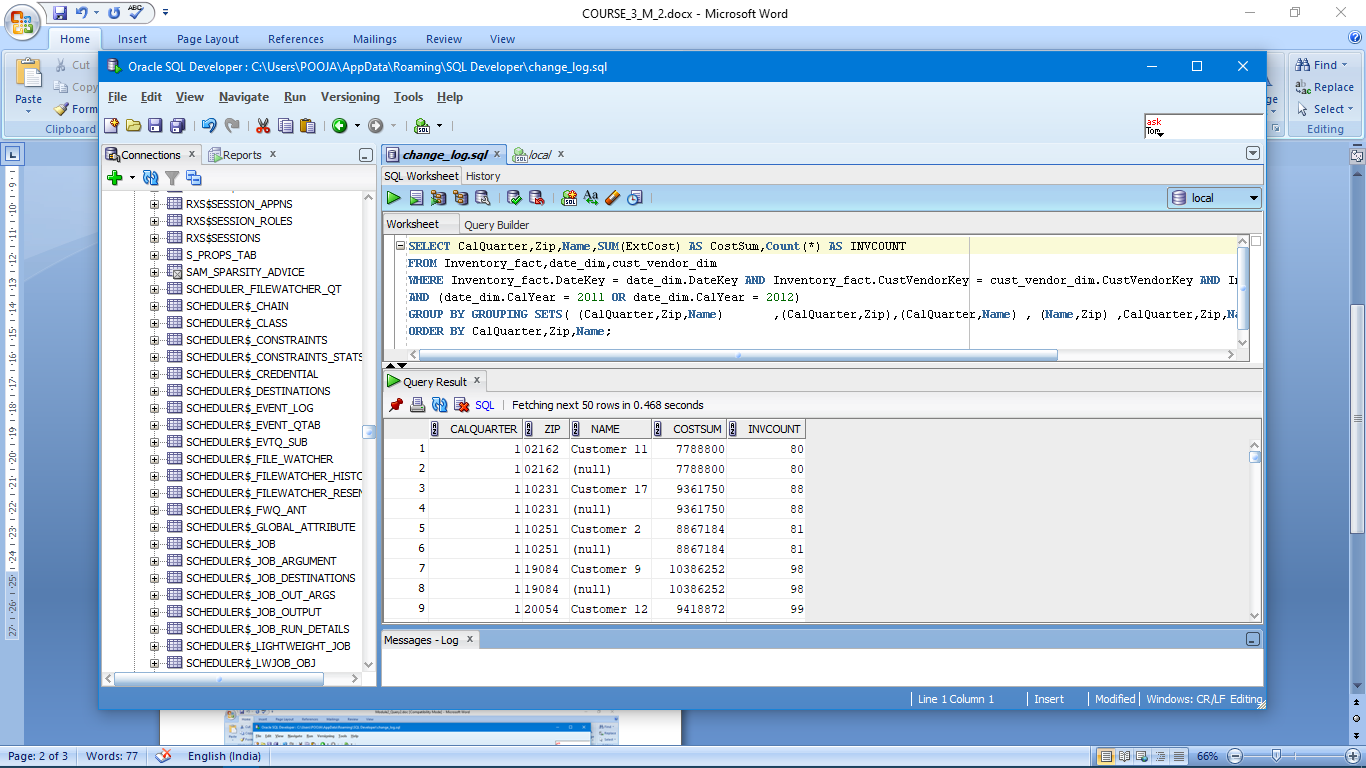
FROM Inventory\_fact,date\_dim,cust\_vendor\_dim

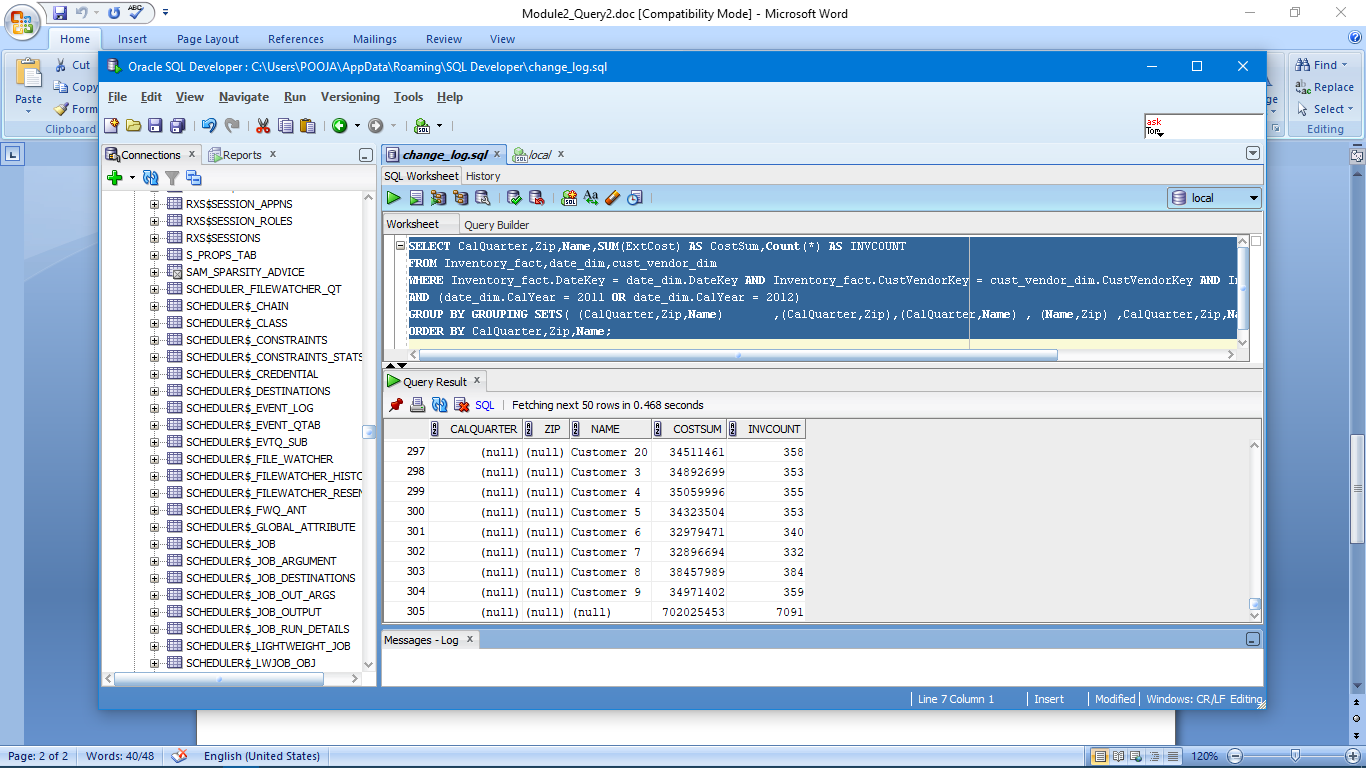
WHERE Inventory\_fact.DateKey = date\_dim.DateKey AND Inventory\_fact.CustVendorKey = cust\_vendor\_dim.CustVendorKey AND Inventory\_fact.TransTypeKey = 5

AND (date\_dim.CalYear = 2011 OR date\_dim.CalYear = 2012)

GROUP BY GROUPING SETS( (CalQuarter,Zip,Name) ,(CalQuarter,Zip),(CalQuarter,Name) , (Name,Zip) ,CalQuarter,Zip,Name,())

ORDER BY CalQuarter,Zip,Name;





3)

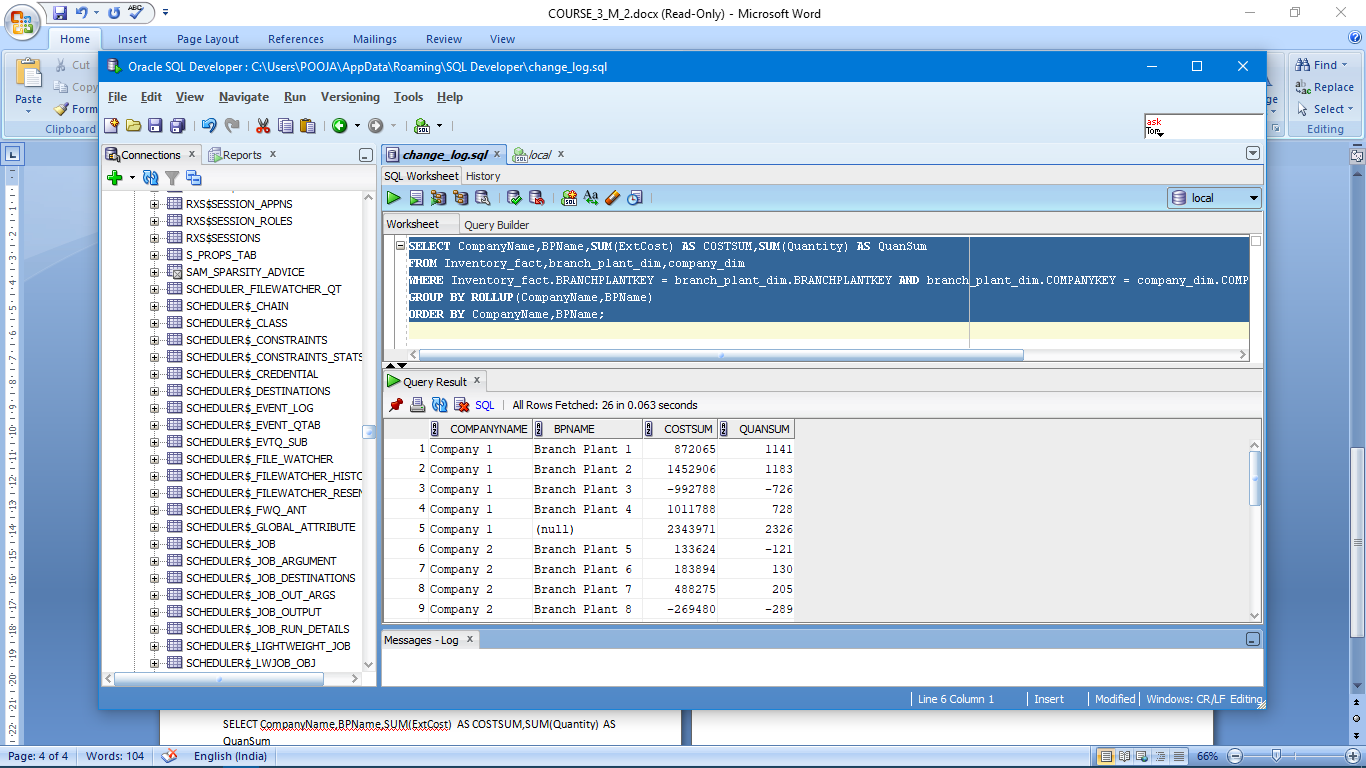
SELECT CompanyName,BPName,SUM(ExtCost) AS COSTSUM,SUM(Quantity) AS QuanSum

FROM Inventory\_fact,branch\_plant\_dim,company\_dim

WHERE Inventory\_fact.BRANCHPLANTKEY = branch\_plant\_dim.BRANCHPLANTKEY AND branch\_plant\_dim.COMPANYKEY = company\_dim.COMPANYKEY AND Inventory\_fact.TransTypeKey = 2

GROUP BY ROLLUP(CompanyName,BPName)

ORDER BY CompanyName,BPName;



4)

SELECT TransDescription,CompanyName,BPName,SUM(ExtCost) AS COSTSUM,Count(\*) AS INVCOUNT

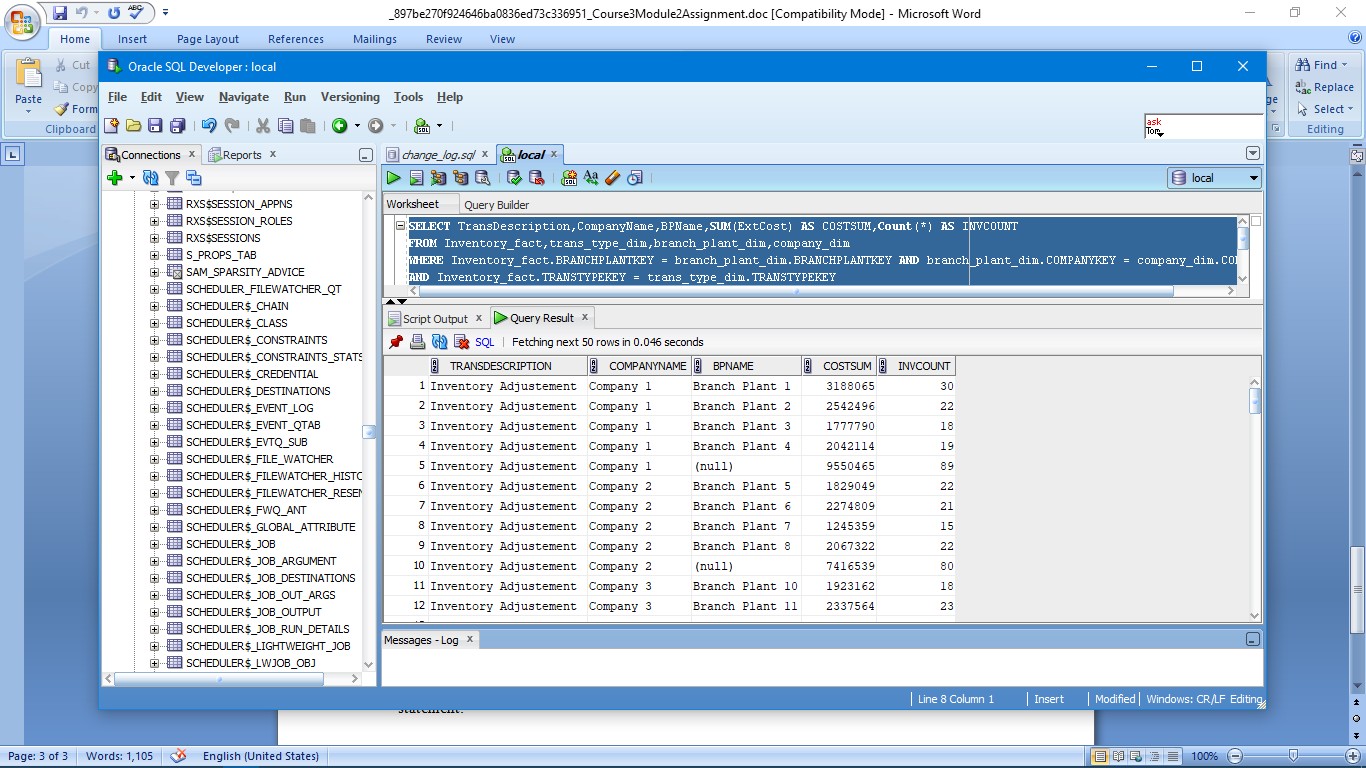
FROM Inventory\_fact,trans\_type\_dim,branch\_plant\_dim,company\_dim

WHERE Inventory\_fact.BRANCHPLANTKEY = branch\_plant\_dim.BRANCHPLANTKEY AND branch\_plant\_dim.COMPANYKEY = company\_dim.COMPANYKEY

AND Inventory\_fact.TRANSTYPEKEY = trans\_type\_dim.TRANSTYPEKEY

GROUP BY GROUPING SETS ( (TransDescription,CompanyName,BPName),(TransDescription,CompanyName), TransDescription,())

ORDER BY TransDescription,CompanyName,BPName;



5)

SELECT CalYear,CalQuarter,Name,SUM(ExtCost) AS CUSTSUM,Count(\*) AS INVCOUNT

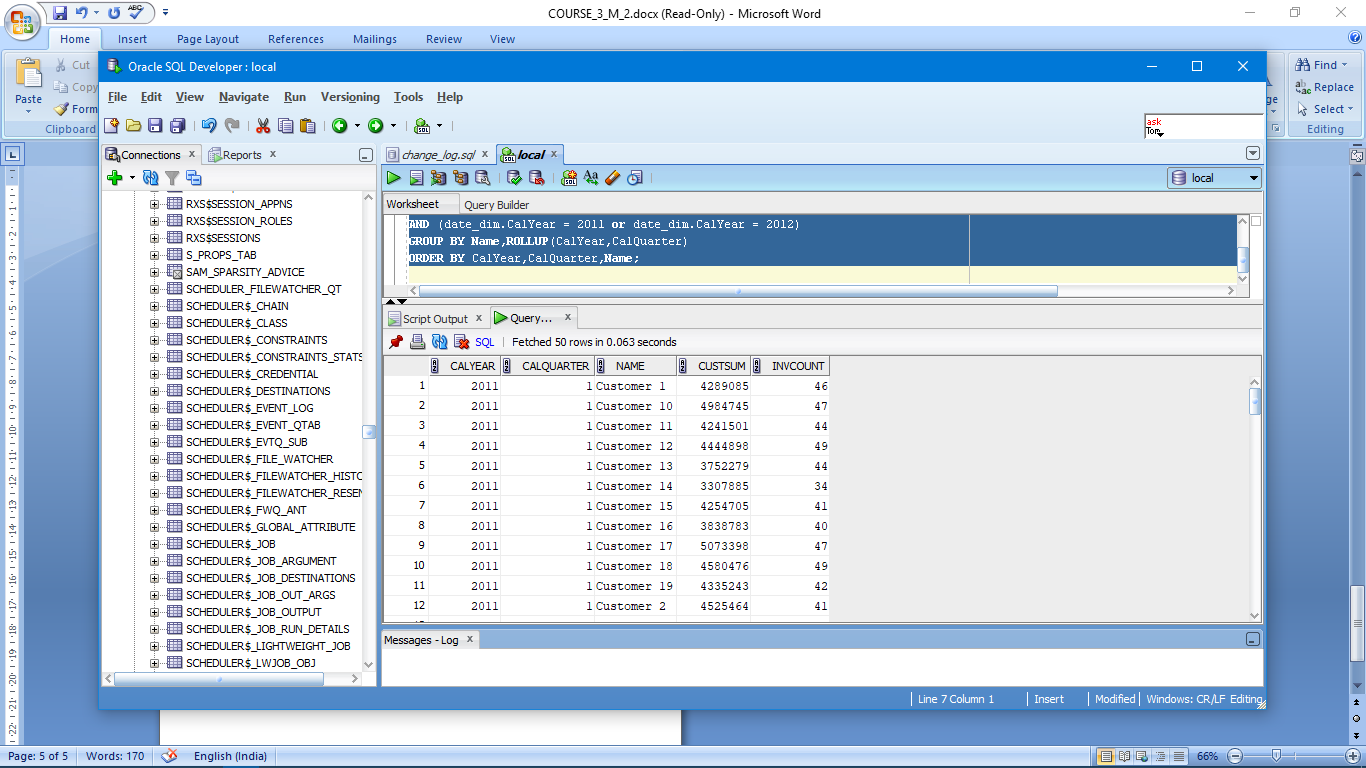
FROM Inventory\_fact,date\_dim,cust\_vendor\_dim

WHERE Inventory\_fact.DateKey = date\_dim.DateKey AND Inventory\_fact.CustVendorKey = cust\_vendor\_dim.CustVendorKey AND Inventory\_fact.TransTypeKey = 5

AND (date\_dim.CalYear = 2011 or date\_dim.CalYear = 2012)

GROUP BY Name,ROLLUP(CalYear,CalQuarter)

ORDER BY CalYear,CalQuarter,Name;



6)

SELECT CalMonth,AddrCatCode1,SUM(ExtCost) AS CostSum,SUM(Quantity) AS QuanSum

FROM Inventory\_fact,date\_dim,cust\_vendor\_dim

WHERE Inventory\_fact.DateKey = date\_dim.DateKey AND Inventory\_fact.CustVendorKey = cust\_vendor\_dim.CustVendorKey AND Inventory\_fact.TransTypeKey = 5

AND date\_dim.CalYear = 2011

GROUP BY CalMonth,AddrCatCode1

UNION

SELECT CalMonth,NULL,SUM(ExtCost) AS CostSum,SUM(Quantity) AS QuanSum

FROM Inventory\_fact,date\_dim,cust\_vendor\_dim

WHERE Inventory\_fact.DateKey = date\_dim.DateKey AND Inventory\_fact.CustVendorKey = cust\_vendor\_dim.CustVendorKey AND Inventory\_fact.TransTypeKey = 5

AND date\_dim.CalYear = 2011

GROUP BY CalMonth

UNION

SELECT NULL,AddrCatCode1,SUM(ExtCost) AS CostSum,SUM(Quantity) AS QuanSum

FROM Inventory\_fact,date\_dim,cust\_vendor\_dim

WHERE Inventory\_fact.DateKey = date\_dim.DateKey AND Inventory\_fact.CustVendorKey = cust\_vendor\_dim.CustVendorKey AND Inventory\_fact.TransTypeKey = 5

AND date\_dim.CalYear = 2011

GROUP BY AddrCatCode1

UNION

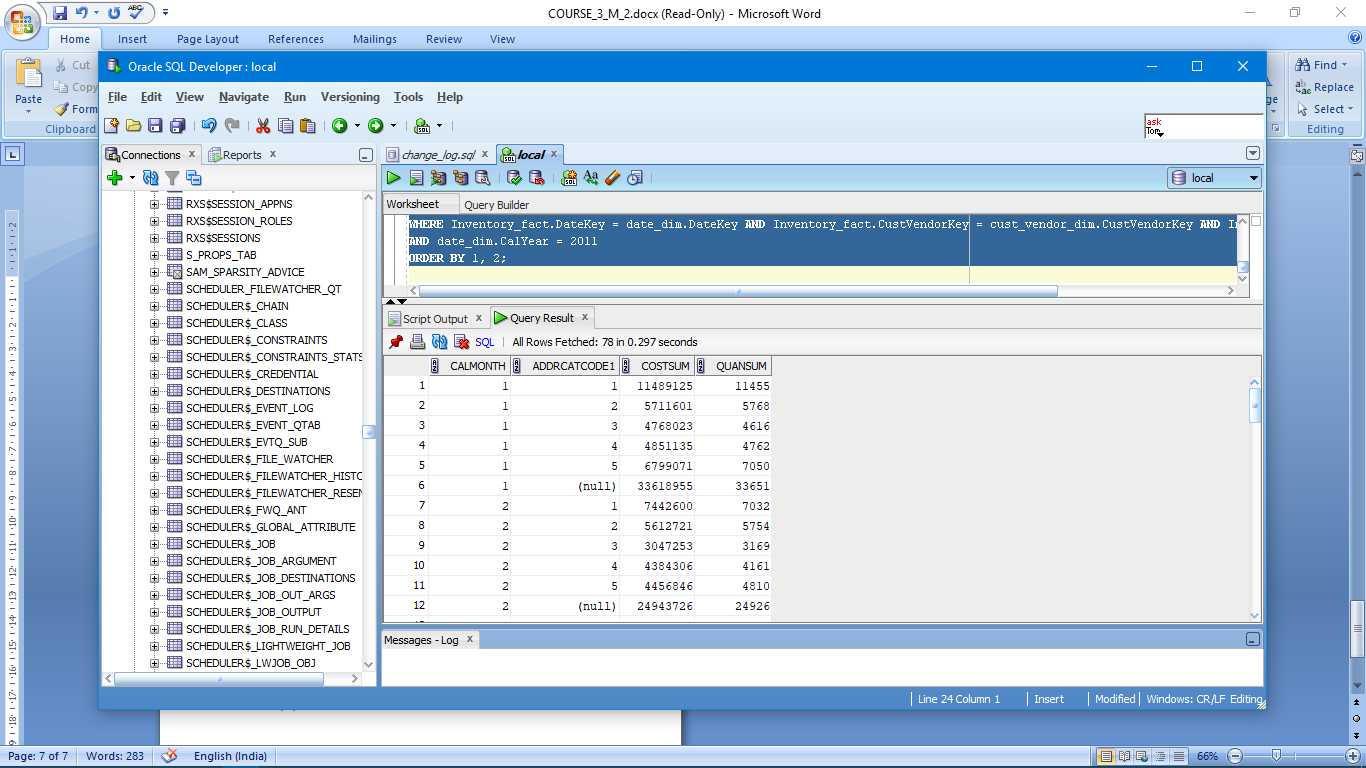
SELECT NULL,NULL,SUM(ExtCost) AS CostSum,SUM(Quantity) AS QuanSum

FROM Inventory\_fact,date\_dim,cust\_vendor\_dim

WHERE Inventory\_fact.DateKey = date\_dim.DateKey AND Inventory\_fact.CustVendorKey = cust\_vendor\_dim.CustVendorKey AND Inventory\_fact.TransTypeKey = 5

AND date\_dim.CalYear = 2011

ORDER BY 1, 2;



7)

SELECT CompanyName,BPName,SUM(ExtCost) AS COSTSUM,SUM(Quantity) AS QuanSum

FROM Inventory\_fact,branch\_plant\_dim,company\_dim

WHERE Inventory\_fact.BRANCHPLANTKEY = branch\_plant\_dim.BRANCHPLANTKEY AND branch\_plant\_dim.COMPANYKEY = company\_dim.COMPANYKEY AND Inventory\_fact.TransTypeKey = 2

GROUP BY CompanyName,BPName

UNION

SELECT CompanyName,NULL,SUM(ExtCost) AS COSTSUM,SUM(Quantity) AS QuanSum

FROM Inventory\_fact,branch\_plant\_dim,company\_dim

WHERE Inventory\_fact.BRANCHPLANTKEY = branch\_plant\_dim.BRANCHPLANTKEY AND branch\_plant\_dim.COMPANYKEY = company\_dim.COMPANYKEY AND Inventory\_fact.TransTypeKey = 2

GROUP BY CompanyName

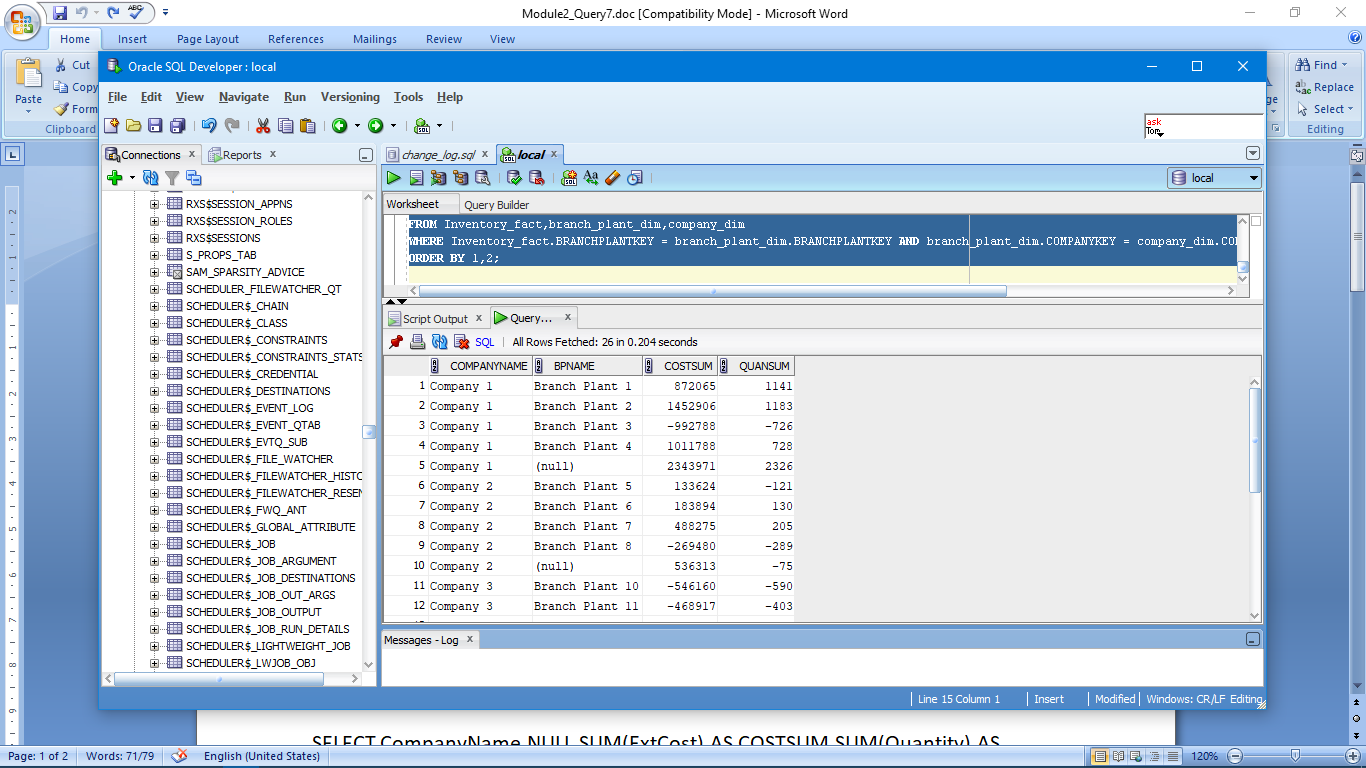
UNION

SELECT NULL,NULL,SUM(ExtCost) AS COSTSUM,SUM(Quantity) AS QuanSum

FROM Inventory\_fact,branch\_plant\_dim,company\_dim

WHERE Inventory\_fact.BRANCHPLANTKEY = branch\_plant\_dim.BRANCHPLANTKEY AND branch\_plant\_dim.COMPANYKEY = company\_dim.COMPANYKEY AND Inventory\_fact.TransTypeKey = 2

ORDER BY 1,2;



8)

SELECT CalYear,CalQuarter,Name,SUM(ExtCost) AS CUSTSUM,Count(\*) AS INVCOUNT

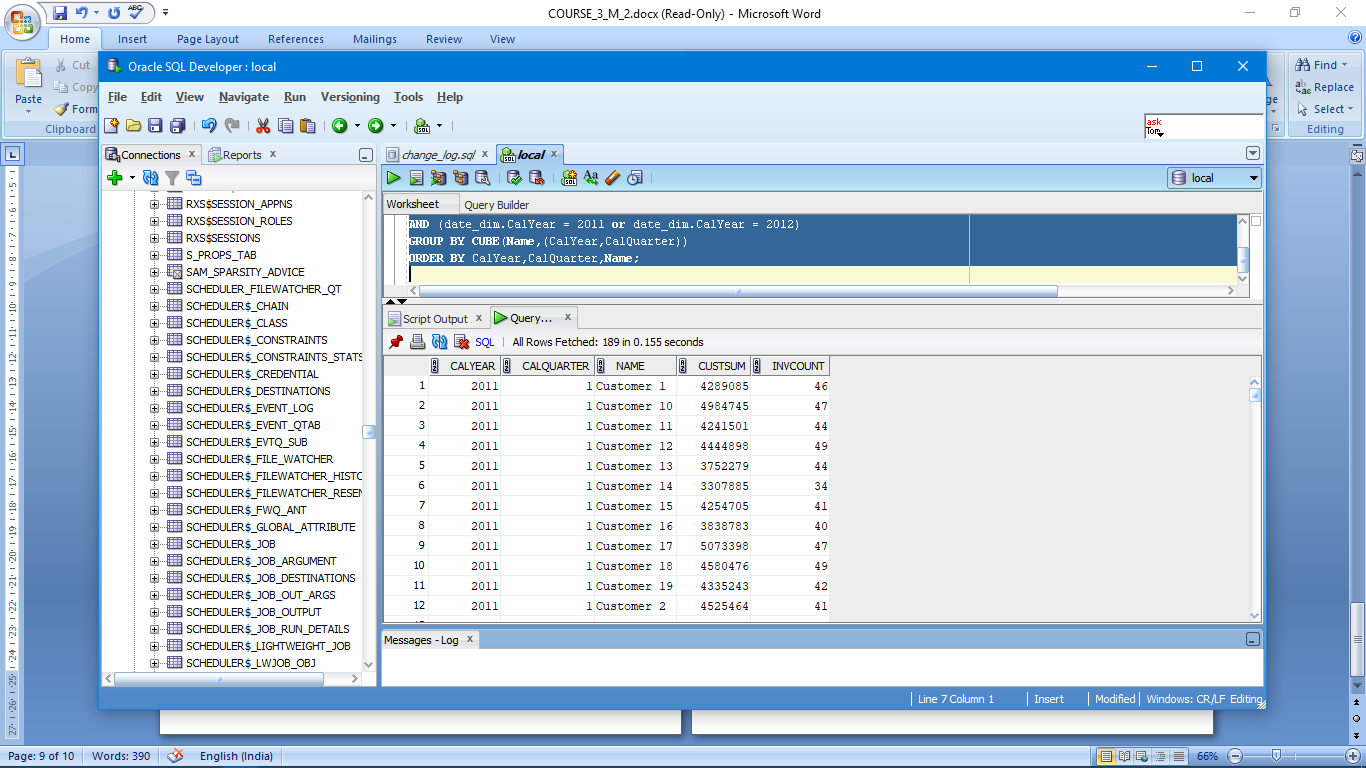
FROM Inventory\_fact,date\_dim,cust\_vendor\_dim

WHERE Inventory\_fact.DateKey = date\_dim.DateKey AND Inventory\_fact.CustVendorKey = cust\_vendor\_dim.CustVendorKey AND Inventory\_fact.TransTypeKey = 5

AND (date\_dim.CalYear = 2011 or date\_dim.CalYear = 2012)

GROUP BY CUBE(Name,(CalYear,CalQuarter))

ORDER BY CalYear,CalQuarter,Name;



9)

SELECT CalMonth,AddrCatCode1,SUM(ExtCost) AS CostSum,SUM(Quantity) AS QuanSum, GROUPING\_ID(CalMonth,AddrCatCode1) AS GROUP\_NUMBER

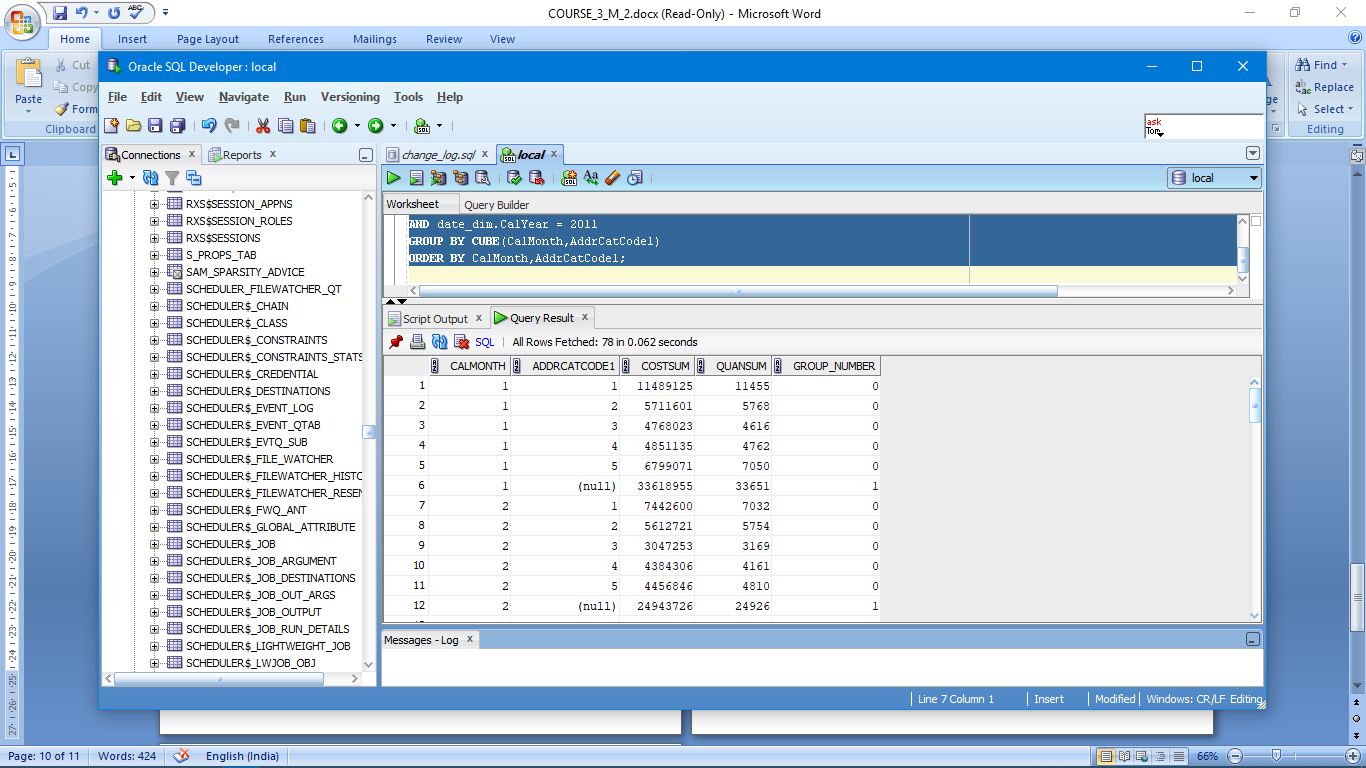
FROM Inventory\_fact,date\_dim,cust\_vendor\_dim

WHERE Inventory\_fact.DateKey = date\_dim.DateKey AND Inventory\_fact.CustVendorKey = cust\_vendor\_dim.CustVendorKey AND Inventory\_fact.TransTypeKey = 5

AND date\_dim.CalYear = 2011

GROUP BY CUBE(CalMonth,AddrCatCode1)

ORDER BY CalMonth,AddrCatCode1;



10)

SELECT CalYear,CalQuarter,Name,SUM(ExtCost) AS CUSTSUM,Count(\*) AS INVCOUNT

FROM Inventory\_fact,date\_dim,cust\_vendor\_dim

WHERE Inventory\_fact.DateKey = date\_dim.DateKey AND Inventory\_fact.CustVendorKey = cust\_vendor\_dim.CustVendorKey AND Inventory\_fact.TransTypeKey = 5

AND (date\_dim.CalYear = 2011 or date\_dim.CalYear = 2012)

GROUP BY GROUPING SETS(Name,ROLLUP(CalYear,CalQuarter))

ORDER BY CalYear,CalQuarter,Name;

