**AdventureWorks2017 solutions for the queries**

1) What are the sales, product costs, profit, number of orders & quantity ordered for internet sales by product category and ranked by sales?

select PC.[Name] as Product\_Category,

count(SD.[SalesOrderID]) as No\_Of\_Orders,

concat('$',sum([LineTotal])) as Sales\_amount,

concat('$',sum([StandardCost])) as Total\_product\_cost,

concat('$',sum([LineTotal]-[StandardCost])) as Total\_Profit,

sum([OrderQty]) as Total\_Order\_Quanity

from [Sales].[SalesOrderDetail] SD

join [Production].[Product] P on P.[ProductID]=SD.[ProductID]

join [Production].[ProductSubcategory] PSC on PSC.[ProductSubcategoryID]=P.[ProductSubcategoryID]

join [Production].[ProductCategory] PC on PC.[ProductCategoryID]=PSC.[ProductCategoryID]

join [Sales].[SalesOrderHeader] SH on SH.SalesOrderID=SD.SalesOrderID

where SH.OnlineOrderFlag=1

group by PC.[Name]

order by sum([LineTotal]) desc;

2) What are the sales, product costs, profit, number of orders & quantity ordered for reseller sales by product category and ranked by sales?

select PC.[Name] as Product\_Category,

count(SD.[SalesOrderID]) as No\_Of\_Orders,

concat('$',sum([LineTotal])) as Sales\_amount,

concat('$',sum([StandardCost])) as Total\_product\_cost,

concat('$',sum([LineTotal]-[StandardCost])) as Total\_Profit,

sum([OrderQty]) as Total\_Order\_Quanity

from [Sales].[SalesOrderDetail] SD

join [Production].[Product] P on P.[ProductID]=SD.[ProductID]

join [Production].[ProductSubcategory] PSC on PSC.[ProductSubcategoryID]=P.[ProductSubcategoryID]

join [Production].[ProductCategory] PC on PC.[ProductCategoryID]=PSC.[ProductCategoryID]

join [Sales].[SalesOrderHeader] SH on SH.SalesOrderID=SD.SalesOrderID

where SH.OnlineOrderFlag=0

group by PC.[Name]

order by sum([LineTotal]) desc;

3) What are the sales, product costs, profit, number of orders & quantity ordered for both internet & reseller sales by product category and ranked by sales?

select PC.[Name] as Product\_Category,

count(SD.[SalesOrderID]) as No\_Of\_Orders,

concat('$',sum([LineTotal])) as Sales\_amount,

concat('$',sum([StandardCost])) as Total\_product\_cost,

concat('$',sum([LineTotal]-[StandardCost])) as Total\_Profit,

sum([OrderQty]) as Total\_Order\_Quanity

from [Sales].[SalesOrderDetail] SD

join [Production].[Product] P on P.[ProductID]=SD.[ProductID]

join [Production].[ProductSubcategory] PSC on PSC.[ProductSubcategoryID]=P.[ProductSubcategoryID]

join [Production].[ProductCategory] PC on PC.[ProductCategoryID]=PSC.[ProductCategoryID]

join [Sales].[SalesOrderHeader] SH on SH.SalesOrderID=SD.SalesOrderID

group by PC.[Name]

order by sum([LineTotal]) desc;

4) What are the sales, product costs, profit, number of orders & quantity ordered for product category Accessories broken-down by Product Hierarchy (Category, Subcategory, Model & Product) for both internet & reseller sales?

select PC.[Name] as Product\_Category,

count(so.[SalesOrderID]) as No\_Of\_Orders,

concat('$',sum([LineTotal])) as Sales\_amount,

concat('$',sum([StandardCost])) as Total\_product\_cost,

concat('$',sum([LineTotal]-[StandardCost])) as Total\_Profit,

sum([OrderQty]) as Total\_Order\_Quanity

from [Sales].[SalesOrderHeader] as so

join [Sales].[SalesOrderDetail] od on od.SalesOrderID = so.SalesOrderID

join [Production].[Product] p on p.ProductID = od.ProductID

join [Production].[ProductSubcategory] ps on ps.ProductSubcategoryID = p.ProductSubcategoryID

join [Production].[ProductCategory] pc on pc.ProductCategoryID = pc.ProductCategoryID

join [Production].[ProductModel] pm on pm.ProductModelID = p.ProductModelID

where pc.Name = 'Accessories'

group by pc.Name

order by sum(LineTotal) desc;

5) What are the sales, product costs, profit, number of orders & quantity ordered for both internet & reseller sales by country and ranked by sales?

select concat('$', sum(LineTotal)) as Sales,

concat('$', sum(StandardCost)) as ProductCost,

concat('$', sum((LineTotal) - (StandardCost))) as Profit,

sum(od.OrderQty) as NoOfOrders, st.CountryRegionCode

from [Sales].[SalesOrderHeader] as so

join [Sales].[SalesOrderDetail] od on od.SalesOrderID = so.SalesOrderID

join [Production].[Product] p on p.ProductID = od.ProductID

join [Sales].[SalesTerritory] st on st.TerritoryID = so.TerritoryID

group by st.CountryRegionCode

order by sum(LineTotal) desc;

6) What are the sales, product costs, profit, number of orders & quantity ordered for France by city and ranked by sales for both internet & reseller sales?

select concat('$', sum(LineTotal)) as Sales,

concat('$', sum(StandardCost)) as ProductCost,

concat('$', sum((LineTotal) - (StandardCost))) as Profit,

sum(od.OrderQty) as NoOfOrders, st.CountryRegionCode

from [Sales].[SalesOrderHeader] as so

join [Sales].[SalesOrderDetail] od on od.SalesOrderID = so.SalesOrderID

join [Production].[Product] p on p.ProductID = od.ProductID

join [Sales].[SalesTerritory] st on st.TerritoryID = so.TerritoryID

where st.CountryRegionCode = 'FR'

group by st.CountryRegionCode

order by sum(LineTotal) desc;

7) What are the top ten resellers by reseller hierarchy (business type, reseller name) ranked by sales?

SELECT top 10 ST.Name,[BusinessEntityID], SUM(SOD.LineTotal) as Total\_Sales

FROM [Sales].[SalesOrderHeader] SOH

join [Sales].[SalesOrderDetail] SOD on SOD.[SalesOrderID]=SOH.[SalesOrderID]

join Sales.Store ST on SOH.SalesPersonID = ST.SalesPersonID

GROUP BY st.Name,[BusinessEntityID], sod.LineTotal

ORDER BY Total\_Sales desc;

8) What are the top ten (internet) customers ranked by sales?

Select top 10 FirstName, Lastname ,

CONCAT('$' , SUM(LineTotal)) as Sales

from [Person].[Person]

join [Sales].[Customer] on [Person].[Person].BusinessEntityID = [Sales].[Customer].PersonID

join [Sales].[SalesOrderHeader] on [Sales].[Customer].CustomerID = [Sales].[SalesOrderHeader].CustomerID

join Sales.SalesOrderDetail on Sales.SalesOrderHeader.SalesOrderID = Sales.SalesOrderDetail.SalesOrderID

where OnlineOrderFlag = 1

group by FirstName, Lastname

order by SUM(LineTotal) desc;

9) What are the sales, product costs, profit, number of orders & quantity ordered by Customer Occupation?

select occ.Occupation, concat('$',sum([LineTotal])) as Sales\_amount,

concat('$',sum([StandardCost])) as Total\_product\_cost,

concat('$',sum([LineTotal]-[StandardCost])) as Total\_Profit ,

count(sod.[SalesOrderID]) as No\_Of\_Orders,

sum([OrderQty]) as Total\_Order\_Quanity

from Sales.SalesOrderDetail sod, Production.Product prod,

Sales.SalesOrderHeader soh,Production.ProductSubcategory psc,

Production.ProductCategory pc, Person.Person per,

Sales.Customer cust, Sales.vPersonDemographics occ

where sod.SalesOrderID=soh.SalesOrderID and

prod.ProductSubcategoryID=psc.ProductSubcategoryID

and psc.ProductCategoryID=pc.ProductCategoryID and

sod.ProductID=prod.ProductID and

soh.CustomerID = cust.CustomerID and

cust.CustomerID = per.BusinessEntityID and

per.BusinessEntityID = occ.BusinessEntityID and

soh.OnlineOrderFlag in (0,1)

group by occ.Occupation;

10. What are the ranked sales of the sales people (employees)?

SELECT SalesPersonID, concat('$',SUM([LineTotal])) as Total\_Sales,

DENSE\_RANK() over(order by SUM([LineTotal]) desc) as rnk

FROM Sales.SalesOrderHeader soh

join [Sales].[SalesOrderDetail] SOD on SOD.SalesOrderID=soh.SalesOrderID

WHERE SalesPersonID is not null

GROUP BY SalesPersonID

ORDER BY Total\_Sales desc;

11) What are the sales, discount amounts (promotion discounts), profit and promotion % of sales for Reseller Sales by Promotion Hierarchy (Category, Type & Name) – sorted descending by sales.?

select concat('$',sum([LineTotal])) as Sales\_amount, Sales.SalesOrderDetail.unitpricediscount as Discount,

concat('$',sum([LineTotal]-[StandardCost])) as Total\_Profit,

Sales.SpecialOffer.DiscountPct as Promotional\_Sales\_Percent,

Sales.SpecialOffer.Category as Sales\_Offer\_Category, Sales.SpecialOffer.Type as Offer\_Type,

Sales.SpecialOffer.Description as Offer\_Desc

from sales.SalesOrderHeader

inner join Sales.SalesOrderDetail on Sales.SalesOrderHeader.SalesOrderID = Sales.SalesOrderDetail.SalesOrderID

inner join Production.Product on Sales.SalesOrderDetail.ProductID = Production.Product.ProductID

inner join Sales.SpecialOffer on Sales.SalesOrderDetail.SpecialOfferID = Sales.SpecialOffer.SpecialOfferID

where Sales.SalesOrderHeader.OnlineOrderFlag = 0

group by Sales.SpecialOffer.Category, Sales.SpecialOffer.Type, Sales.SpecialOffer.Description,

Sales.SpecialOffer.DiscountPct,Sales.SalesOrderDetail.unitpricediscount

order by sum([LineTotal]) desc;

12) What are the sales, product costs, profit, number of orders & quantity ordered by Sales Territory Hierarchy (Group, Country, region) and ranked by sales for both internet & reseller sales?

Select [Sales].[SalesTerritory].Name as TerritoryName,

[Sales].[SalesTerritory].[Group] as TerritoryGroup,

[Person].[CountryRegion].Name as CountryRegion,

CONCAT('$',SUM(LineTotal)) as Sales,

CONCAT('$',SUM([StandardCost])) as TotalProductCost ,

CONCAT('$',SUM(LineTotal - StandardCost)) as TotalProfit,

COUNT(Sales.SalesOrderDetail.SalesOrderID) as NoOfOrders,

SUM(OrderQty) as OrderedQuantity

from [Sales].[SalesOrderDetail]

join Sales.SalesOrderHeader on Sales.SalesOrderHeader.SalesOrderID = Sales.SalesOrderDetail.SalesOrderID

join [Production].[Product] on [Production].[Product].[ProductID] = [Sales].[SalesOrderDetail].ProductID

join [Sales].[SalesTerritory]on [Sales].[SalesOrderHeader].TerritoryID = [Sales].[SalesTerritory].TerritoryID

join [Person].[CountryRegion] on [Sales].[SalesTerritory].CountryRegionCode = [Person].[CountryRegion].CountryRegionCode

group by [Sales].[SalesTerritory].Name,

[Sales].[SalesTerritory].[Group],

[Person].[CountryRegion].Name

order by SUM(LineTotal)desc ;

13) What are the sales by year by sales channels (internet, reseller & total)?

select OnlineOrderFlag, year(OrderDate) as year, sum(TotalDue) as Total\_Sales

from Sales.SalesOrderHeader

group by rollup (year(OrderDate), OnlineOrderFlag);

14) What are the total sales by month (& year)?

select datename(month,sales.SalesOrderHeader.OrderDate) as Month,

year(sales.SalesOrderHeader.OrderDate) as Year,sum(TotalDue) as Total\_Sales

from Sales.SalesOrderHeader

inner join Sales.SalesOrderDetail on Sales.SalesOrderHeader.SalesOrderID=sales.SalesOrderDetail.SalesOrderID

group by year(sales.SalesOrderHeader.OrderDate),datename(month,sales.SalesOrderHeader.OrderDate)

order by year(sales.SalesOrderHeader.OrderDate), datename(month,sales.SalesOrderHeader.OrderDate);

**AdventureWorks2017DW solutions for the queries**

1) What are the sales, product costs, profit, number of orders & quantity ordered for internet sales by product category and ranked by sales?

select pc.EnglishProductCategoryName as Product\_Category,

concat('$',sum(fis.SalesAmount)) as Sales,

concat('$', sum(fis.ProductStandardCost)) as ProductStandardCost,

concat('$', sum((fis.SalesAmount) - (fis.ProductStandardCost))) as Profit,

count(fis.SalesOrderNumber) as No\_of\_orders,

sum(fis.OrderQuantity) as Total\_OrderQuantity

from [dbo].[FactInternetSales] as fis

join [dbo].[DimProduct] p on p.ProductKey = fis.ProductKey

join [dbo].[DimProductSubcategory] ps on ps.ProductSubcategoryKey = p.ProductSubcategoryKey

join [dbo].[DimProductCategory] pc on pc.ProductCategoryKey = ps.ProductCategoryKey

group by pc.EnglishProductCategoryName

order by sum(fis.SalesAmount) desc;

2) What are the sales, product costs, profit, number of orders & quantity ordered for reseller sales by product category and ranked by sales?

select pc.EnglishProductCategoryName as Product\_Category,

concat('$',sum(frs.SalesAmount)) as Sales,

concat('$', sum(frs.ProductStandardCost)) as ProductStandardCost,

concat('$', sum((frs.SalesAmount) - (frs.ProductStandardCost))) as Profit,

count(frs.SalesOrderNumber) as No\_of\_orders,

sum(frs.OrderQuantity) as Total\_OrderQuantity

from [dbo].[FactResellerSales] as frs

join [dbo].[DimProduct] p on p.ProductKey = frs.ProductKey

join [dbo].[DimProductSubcategory] ps on ps.ProductSubcategoryKey = p.ProductSubcategoryKey

join [dbo].[DimProductCategory] pc on pc.ProductCategoryKey = ps.ProductCategoryKey

group by pc.EnglishProductCategoryName

order by sum(frs.SalesAmount) desc;

3) What are the sales, product costs, profit, number of orders & quantity ordered for both internet & reseller sales by product category and ranked by sales?

select pc.EnglishProductCategoryName as Product\_Category,

count(fis.SalesOrderNumber)+count(frs.SalesOrderNumber),

concat('$',sum(fis.SalesAmount)+sum(frs.SalesAmount)) as Sales,

concat('$', sum(fis.ProductStandardCost)+sum(frs.ProductStandardCost)) as ProductStandardCost,

concat('$', sum((fis.SalesAmount) - (fis.ProductStandardCost))+ sum((frs.SalesAmount) - (frs.ProductStandardCost))) as Profit,

sum(fis.OrderQuantity)+ sum(frs.OrderQuantity) as OrderQuantity

from [dbo].[DimProduct] as p

left join [dbo].[FactInternetSales] fis on p.ProductKey = fis.ProductKey

left join [dbo].[FactResellerSales] frs on p.ProductKey = frs.ProductKey

join [dbo].[DimProductSubcategory] ps on ps.ProductSubcategoryKey = p.ProductSubcategoryKey

join [dbo].[DimProductCategory] pc on pc.ProductCategoryKey = ps.ProductCategoryKey

group by pc.EnglishProductCategoryName

order by sum(fis.SalesAmount) + sum(frs.SalesAmount) desc;

4) What are the sales, product costs, profit, number of orders & quantity ordered for product category Accessories broken-down by Product Hierarchy (Category, Subcategory, Model & Product) for both internet & reseller sales?

select pc.EnglishProductCategoryName as Product\_Category,

concat('$',sum(fis.SalesAmount)+sum(frs.SalesAmount)) as Sales,

concat('$', sum(fis.ProductStandardCost)+sum(frs.ProductStandardCost)) as ProductStandardCost,

concat('$', sum((fis.SalesAmount) - (fis.ProductStandardCost))+ sum(frs.SalesAmount) - sum(frs.ProductStandardCost)) as Profit,

sum(fis.OrderQuantity)+ sum(frs.OrderQuantity) as OrderQuantity, ps.EnglishProductSubcategoryName,

p.ModelName,p.EnglishProductName

from [dbo].[DimProduct] as p

join [dbo].[FactInternetSales] fis on p.ProductKey = fis.ProductKey

join [dbo].[FactResellerSales] frs on p.ProductKey = frs.ProductKey

join [dbo].[DimProductSubcategory] ps on ps.ProductSubcategoryKey = p.ProductSubcategoryKey

join [dbo].[DimProductCategory] pc on pc.ProductCategoryKey = ps.ProductCategoryKey

where pc.EnglishProductCategoryName = 'Accessories'

group by pc.EnglishProductCategoryName,ps.EnglishProductSubcategoryName, p.ModelName, p.EnglishProductName

order by sum(fis.SalesAmount)+sum(frs.SalesAmount);

5) What are the sales, product costs, profit, number of orders & quantity ordered for both internet & reseller sales by country and ranked by sales?

select st.SalesTerritoryCountry as Sales\_territory\_country,

count(fis.SalesOrderNumber)+count(frs.SalesOrderNumber),

concat('$',sum(fis.SalesAmount)+sum(frs.SalesAmount)) as Sales,

concat('$', sum(fis.ProductStandardCost)+sum(frs.ProductStandardCost)) as ProductStandardCost,

concat('$', sum(((fis.SalesAmount) - (fis.ProductStandardCost)))+ sum((frs.SalesAmount) - (frs.ProductStandardCost))) as Profit,

sum(fis.OrderQuantity)+ sum(frs.OrderQuantity) as OrderQuantity

from [dbo].[DimSalesTerritory] as st

join [dbo].[FactInternetSales] fis on st.SalesTerritoryKey = fis.SalesTerritoryKey

join [dbo].[FactResellerSales] frs on st.SalesTerritoryKey = frs.SalesTerritoryKey

group by st.SalesTerritoryCountry

order by sum(fis.SalesAmount)+sum(frs.SalesAmount);

6) What are the sales, product costs, profit, number of orders & quantity ordered for France by city and ranked by sales for both internet & reseller sales?

select st.SalesTerritoryCountry as Sales\_territory\_country,

concat('$',sum(fis.SalesAmount)+sum(frs.SalesAmount)) as Sales,

concat('$', sum(fis.ProductStandardCost)+sum(frs.ProductStandardCost)) as ProductStandardCost,

concat('$', sum((fis.SalesAmount) - (fis.ProductStandardCost))+ sum(frs.SalesAmount) - sum(frs.ProductStandardCost)) as Profit,

sum(fis.OrderQuantity)+ sum(frs.OrderQuantity) as OrderQuantity

from [dbo].[DimSalesTerritory] as st

join [dbo].[FactInternetSales] fis on st.SalesTerritoryKey = fis.SalesTerritoryKey

join [dbo].[FactResellerSales] frs on st.SalesTerritoryKey = frs.SalesTerritoryKey

where st.SalesTerritoryCountry = 'France'

group by st.SalesTerritoryCountry

order by sum(fis.SalesAmount)+sum(frs.SalesAmount);

7) What are the top ten resellers by reseller hierarchy (business type, reseller name) ranked by sales?

select top 10 [ResellerName],[BusinessType], [SalesAmount]

from [dbo].[DimReseller] R

join [dbo].[FactResellerSales] FRS on FRS.ResellerKey=R.ResellerKey

order by [SalesAmount] Desc;

8) What are the top ten (internet) customers ranked by sales?

Select top 10 c.FirstName, c.Lastname ,

CONCAT('$' , SUM(fis.SalesAmount)) as Sales

from [dbo].[FactInternetSales] as fis

join [dbo].[DimCustomer] c on c.CustomerKey = fis.CustomerKey

group by c.FirstName, c.Lastname

order by SUM(fis.SalesAmount) desc;

9) What are the sales, product costs, profit, number of orders & quantity ordered by Customer Occupation?

select c.EnglishOccupation as Customer\_Occupation, concat('$',sum(fis.SalesAmount)) as Sales,

concat('$', sum(fis.ProductStandardCost)) as ProductStandardCost,

concat('$', sum((fis.SalesAmount) - (fis.ProductStandardCost))) as Profit,

sum(fis.OrderQuantity) as OrderQuantity

from [dbo].[DimCustomer] as c, [dbo].[FactInternetSales] as fis

where fis.CustomerKey = c.CustomerKey

group by c.EnglishOccupation;

10) What are the ranked sales of the sales people (employees)?

Select concat(E.firstname,' ',E.lastname) as Name,

sum(frs.salesamount) as Total\_Sales ,

DENSE\_RANK() over( order by sum(salesamount) desc) as rn

from FactResellerSales as frs

inner join DimEmployee as E on frs.EmployeeKey=E.EmployeeKey

group by E.FirstName, E.LastName

order by Total\_Sales desc;

11) What are the sales, discount amounts (promotion discounts), profit and promotion % of sales for Reseller Sales by Promotion Hierarchy (Category, Type & Name) – sorted descending by sales.?

select concat('$',sum(frs.SalesAmount)) as Total\_Sales, concat('$',sum(frs.DiscountAmount)) as Total\_discount,

concat('$', sum((frs.SalesAmount) - (frs.ProductStandardCost))) as Profit,

sum(p.DiscountPct) as Discount\_percentage, p.EnglishPromotionName as Promotion\_name,

p.EnglishPromotionType as Promotion\_type, p.EnglishPromotionCategory as Promotion\_category

from [dbo].[FactResellerSales] as frs

join [dbo].[DimPromotion] p on p.PromotionKey = frs.PromotionKey

group by p.EnglishPromotionName, p.EnglishPromotionType, p.EnglishPromotionCategory

order by sum(frs.SalesAmount) desc;

12) What are the sales, product costs, profit, number of orders & quantity ordered by Sales Territory Hierarchy (Group, Country, region) and ranked by sales for both internet & reseller sales?

select st.SalesTerritoryGroup, st.SalesTerritoryCountry, st.SalesTerritoryRegion,

concat('$',sum(fis.SalesAmount)) as Sales, concat('$', sum(fis.ProductStandardCost)) as ProductStandardCost,

concat('$', sum((fis.SalesAmount) - (fis.ProductStandardCost))) as Profit,

sum(fis.OrderQuantity) as OrderQuantity,concat('$',sum(frs.SalesAmount)) as Sales, concat('$', sum(frs.ProductStandardCost)) as ProductStandardCost,

concat('$', sum((frs.SalesAmount) - (frs.ProductStandardCost))) as Profit,

sum(frs.OrderQuantity) as OrderQuantity

from [dbo].[DimSalesTerritory] as st

join [dbo].[FactInternetSales] fis on fis.SalesTerritoryKey = st.SalesTerritoryKey

join [dbo].[FactResellerSales] frs on frs.SalesTerritoryKey = st.SalesTerritoryKey

group by st.SalesTerritoryGroup, st.SalesTerritoryCountry, st.SalesTerritoryRegion

order by sum(fis.SalesAmount), sum(frs.SalesAmount);

13) What are the sales by year by sales channels (internet, reseller & total)?

select fsq.calendaryear as 'Year',

sum(fis.salesamount) as Internet\_Sales,

sum(frs.salesamount) as Reseller\_Sales,

sum(fis.salesamount)+sum(frs.salesamount) as Total\_Sales

from FactSalesQuota as fsq

join DimEmployee as de on fsq.EmployeeKey=de.EmployeeKey

join FactResellerSales as frs on de.EmployeeKey=frs.EmployeeKey

join DimProduct as p on frs.ProductKey=p.ProductKey

join FactInternetSales as fis on fis.ProductKey=p.ProductKey

group by fsq.CalendarYear order by Total\_Sales desc;

14) What are the total sales by month (& year)?

select year(fsq.Date) as Year,

DATENAME(MONTH, fsq.Date) as Month,

sum(fis.salesamount)+sum(frs.salesamount) as Total\_Sales

from FactSalesQuota as fsq

join DimEmployee as de on fsq.EmployeeKey=de.EmployeeKey

join FactResellerSales as frs on de.EmployeeKey=frs.EmployeeKey

join DimProduct as dp on frs.ProductKey=dp.ProductKey

join FactInternetSales as fis on fis.ProductKey=dp.ProductKey

group by fsq.Date order by Total\_Sales desc;

15) Please explain (briefly) the differences between SQL queries used to answer the same questions between AdventureWorksDW2017 & AdventureWorks2017.

AdventureWorks2017 and AdventureWorksDW2017 depict the same business processes. AdventureWorks2017 has more entity and relationships than that of AdventureWorksDW2017.

In AdventureWorksDW2017, the dimensions are denormalized and the facts are normalized.

The AdventureWorksDW2017 which is a dimensional model, was simpler, easier to navigate, and

more understandable than the AdventureWorks2017. It reduced the complexity of the queries as well.

Lot of join operations had to be performed on AdventureWorks2017 in order to query the results where as AdventureWorksDW2017 had few tables with compact and useful data together which was easier to work with than that of AdventureWorks2017 .

In AdventureWorks2017, there is a process- and application-specific design where as AdventureWorksDW2017 has a data- and subject area–driven design. AdventureWorksDW2017 has fewer tables, is more understandable, and is less process-focused.

For example, to calculate the computed column Profit two tables were considered in AdventureWorks2017 i.e Product table for StandardProductCost and SalesOrderDetail table for LineTotal where as AdventureWorksDW2017 has one fact table FactInternetSales which has both SalesAmount and TotalProductCost and hence it was easier to calculate the profit in AdventureWorksDW2017.