



AdventureWork Data

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Kautilya Bhardwaj

Problem Statement

You are a data analyst at AdventureWorks, and there is a board member meeting. The board members want to know the health of the company. Can you extract some insights from the data that you believe are important? They are expecting well-crafted and easy-to-understand reports.

Findings

```
SELECT YEAR(p.StartDate) AS YEAR, SUM(s.UnitPrice - p.StandardCost) AS PROFIT,  
SUM(s.UnitPrice - p.StandardCost)/SUM(p.StandardCost) AS ProfitMargin  
FROM [AdventureWorks2014].[Production].[ProductCostHistory] AS p  
INNER JOIN [AdventureWorks2014].[Sales].[SalesOrderDetail] AS s  
ON s.ProductID = p.ProductID  
GROUP BY YEAR(p.StartDate)  
;
```

PROFIT by year is calculated considering the standard cost variable is the cost of the product and the unit price is the selling price of the product.

	YEAR	PROFIT
1	2013	7723332.1722
2	2011	3776697.1937
3	2012	8001420.5025

```

SELECT s.ProductID,s.Qty,p.Name FROM (
SELECT ProductID, SUM(OrderQty) AS Qty
FROM [AdventureWorks2014].Sales.SalesOrderDetail
WHERE YEAR(ModifiedDate) = 2014
GROUP BY ProductID

) AS s
INNER JOIN AdventureWorks2014.Production.Product AS p
ON s.ProductID = p.ProductID
ORDER BY s.Qty DESC

```

Order quantity of an product in an year, 2014, along with the name of the products

	ProductID	Qty	Name
1	870	2902	Water Bottle - 30 oz.
2	712	1950	AWC Logo Cap
3	711	1776	Sport-100 Helmet, Blue
4	873	1761	Patch Kit/8 Patches
5	707	1717	Sport-100 Helmet, Red
6	708	1716	Sport-100 Helmet, Black
7	921	1501	Mountain Tire Tube
8	864	1395	Classic Vest, S
9	884	1264	Short-Sleeve Classic Jersey, XL
10	922	1156	Road Tire Tube
11	877	1154	Bike Wash - Dissolver
12	869	1133	Women's Mountain Shorts, L
13	867	1094	Women's Mountain Shorts, S
14	878	1033	Fender Set - Mountain
15	876	1029	Hitch Rack - 4-Bike
16	715	1025	Long-Sleeve Logo Jersey, L

```

SELECT YEAR(ModifiedDate) AS Year, SUM(LineTotal) AS Purchasing
FROM [AdventureWorks2014].[Purchasing].PurchaseOrderDetail
GROUP BY YEAR(ModifiedDate)
ORDER BY Year

```

Expenditure of Company on Purchasing in a single year.

	Year	Purchasing
1	2011	403135.804
2	2012	3926893.047
3	2013	19154493.393
4	2014	38143133.679
5	2015	2164338.915

```

SELECT TOP (1000) [TerritoryID]
, [Name]
, [CountryRegionCode]
, [Group]
, [SalesYTD]
FROM [AdventureWorks2014].[Sales].[SalesTerritory]
order by SalesYTD DESC

```

Sales Year to date by region ,

Highest sales in Southwest : 10510853.8739

Lowest sales in Northeast : 2402176.8476

	TerritoryID	Name	CountryRegionCode	Group	SalesYTD
1	4	Southwest	US	North America	10510853.8739
2	1	Northwest	US	North America	7887186.7882
3	6	Canada	CA	North America	6771829.1376
4	9	Australia	AU	Pacific	5977814.9154
5	10	United Kingdom	GB	Europe	5012905.3656
6	7	France	FR	Europe	4772398.3078
7	8	Germany	DE	Europe	3805202.3478
8	3	Central	US	North America	3072175.118
9	5	Southeast	US	North America	2538667.2515
10	2	Northeast	US	North America	2402176.8476