1)

```
1    SELECT table_rows, table_name
2    FROM INFORMATION_SCHEMA.TABLES
3    WHERE TABLE_SCHEMA = 'aw'
```

Result Grid | Filter Rows: | Export:

TABLE_ROWS	TABLE_NAME
99	DimAccount
0	DimCurrency
18304	DimCustomer
7	DimDepartmentGroup
296	DimEmployee
655	DimGeography
14	DimOrganization
158	DimProduct
4	DimProductCategory
37	DimProductSubcategory
16	DimPromotion
701	DimReseller
10	DimSalesReason
11	DimSalesTerritory
3	DimScenario
1158	DimTime
0	FactCurrencyRate
38480	FactFinance
59800	FactInternetSales

2)

Limit to 1000 rows

```
1    SELECT TABLE_NAME, COLUMN_NAME
2    FROM INFORMATION_SCHEMA.COLUMNS
3    WHERE TABLE_SCHEMA = 'aw' AND COLUMN_KEY = 'PRI'
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

TABLE_NAME	COLUMN_NAME
DimAccount	AccountKey
DimCurrency	CurrencyKey
DimCustomer	CustomerKey
DimDepartmentGroup	DepartmentGroupKey
DimEmployee	EmployeeKey
DimGeography	GeographyKey
DimOrganization	OrganizationKey
DimProduct	ProductKey
DimProductCategory	ProductCategoryKey
DimProductSubcategory	ProductSubcategoryKey
DimPromotion	PromotionKey
DimReseller	ResellerKey
DimSalesReason	SalesReasonKey
DimSalesTerritory	SalesTerritoryKey
DimScenario	ScenarioKey
DimTime	TimeKey
FactInternetSales	SalesOrderNumber
FactInternetSales	SalesOrderLineNumber

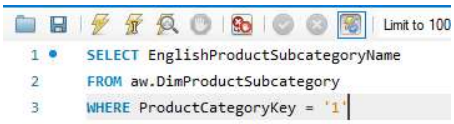
3)

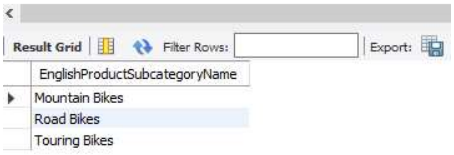
They literally labeled them such. Dimension tables have dim and fact tables have fact.

4)

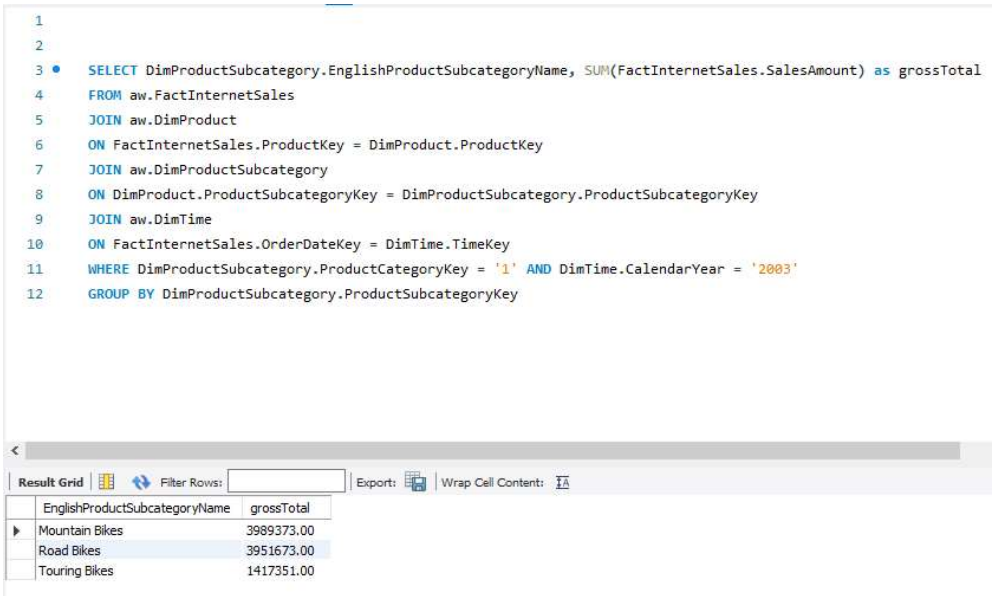
It is because of the parent employee—each boss will have their boss and that boss will have their boss and so on.

5)





6)



7)

```
1  SELECT EnglishProductSubcategoryName
2  FROM aw.DimProductSubcategory
3  WHERE ProductCategoryKey = '3'
4  LIMIT 5
```

Result Grid | Filter Rows: | Export: | Wra

EnglishProductSubcategoryName
Bib-Shorts
Caps
Gloves
Jerseys
Shorts

8)

```
1  SELECT DimTime.CalendarYear, DimProduct.Color, SUM(FactInternetSales.OrderQuantity) as totalBikes
2  FROM aw.FactInternetSales
3  JOIN aw.DimProduct
4  ON FactInternetSales.ProductKey = DimProduct.ProductKey
5  JOIN aw.DimProductSubcategory
6  ON DimProduct.ProductSubcategoryKey = DimProductSubcategory.ProductSubcategoryKey
7  JOIN aw.DimTime
8  ON FactInternetSales.OrderDateKey = DimTime.TimeKey
9  WHERE DimTime.CalendarYear BETWEEN 2000 AND 2005
10 AND DimProductSubcategory.ProductSubcategoryKey  = '1'
11 GROUP BY DimTime.CalendarYear, DimProduct.Color
12 ORDER BY totalBikes DESC
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

CalendarYear	Color	totalBikes
2004	Silver	1205
2003	Silver	1119
2003	Black	969
2004	Black	889
2002	Black	332
2002	Silver	283
2001	Black	89
2001	Silver	84

9)

```
SELECT ModelName, COUNT(ModelName) AS total
FROM aw.DimProduct
JOIN aw.FactInternetSales
ON DimProduct.ProductKey = FactInternetSales.ProductKey
JOIN aw.DimProductSubcategory
ON DimProduct.ProductSubcategoryKey = DimProductSubcategory.ProductSubcategoryKey
JOIN aw.DimCustomer
ON FactInternetSales.CustomerKey = DimCustomer.CustomerKey
WHERE DimCustomer.EnglishEducation = 'Graduate Degree' AND DimProductSubcategory.ProductCategoryKey = '1'
GROUP BY ModelName
ORDER BY total DESC
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

ModelName	total
Mountain-200	715
Road-150	318
Road-250	296
Touring-1000	274
Road-750	219
Road-550-W	216
Road-350-W	150
Road-650	135
Mountain-400-W	101
Touring-3000	91
Mountain-500	76
Touring-2000	68
Mountain-100	61

10)

```
SELECT DimGeography.StateProvinceName, SUM(FactInternetSales.UnitPrice - FactInternetSales.ProductStandardCost) as margin
FROM FactInternetSales
JOIN DimProduct
ON FactInternetSales.ProductKey = DimProduct.ProductKey
JOIN DimCustomer
ON FactInternetSales.CustomerKey = DimCustomer.CustomerKey
JOIN DimGeography
ON DimCustomer.GeographyKey = DimGeography.GeographyKey
JOIN DimTime
ON FactInternetSales.OrderDateKey = DimTime.TimeKey
WHERE DimTime.CalendarYear = '2004'
GROUP BY DimGeography.StateProvinceName
ORDER BY margin DESC
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

StateProvinceName	margin
California	847226.00
England	499735.00
New South Wales	464461.00