SCD Talend SQL Query Output

# Answer the following questions (using SQL & Power BI)

--a. How many rows in target table?

SELECT COUNT(\*) AS Total\_Number\_Of\_Records

FROM [dbo].[ProductPriceHistorySCD]

Total\_Rows: 1

SELECT \* FROM [dbo].[ProductPriceHistorySCD]

--b. How many unique products are being tracked?

SELECT COUNT(DISTINCT([ProductName])) AS UniqueProducts

FROM [dbo].[ProductPriceHistorySCD]

Total\_Rows: 1

--c. How many products have more than 1 price?

SELECT COUNT(DISTINCT lp.[ProductName]) AS Products\_Having\_More\_Than\_1\_ListPrice FROM

(SELECT [ProductName] FROM [dbo].[ProductPriceHistorySCD]

GROUP BY [ProductName]

HAVING COUNT([ListPrice])>1) as lp;

Total\_Rows: 77

--d. What is the list of current product prices? (list product, price, start date of that price and what price version)

SELECT ph.[ProductID], ph.[ListPrice], ph.[scd\_start], ph.[scd\_version], ph.[scd\_active]

FROM [dbo].[ProductPriceHistorySCD] ph

WHERE ph.[scd\_active] = 1

Total\_Rows: 293

--e. What is the product(s) with the maximum price? (list product, price, start date of that price and what price version)

SELECT ph.[ProductID], ph.[ProductName], ph.[ListPrice], ph.[scd\_start], ph.[scd\_version], ph.[scd\_active]

FROM [dbo].[ProductPriceHistorySCD] ph

WHERE ph.[scd\_active] = 1 AND

ph.[ListPrice] = (SELECT MAX (pph.[ListPrice]) FROM [dbo].[ProductPriceHistorySCD] pph)

Total\_Rows: 5

--f. What is the product(s) with the minimum price? (list product, price, start date of that price and what price version)

SELECT ph.[ProductID], ph.[ListPrice], ph.[scd\_start], ph.[scd\_version], ph.[scd\_active]

FROM [dbo].[ProductPriceHistorySCD] ph

WHERE ph.[scd\_active] = 1 AND

ph.[ListPrice] = (SELECT MIN(pph.[ListPrice]) FROM [dbo].[ProductPriceHistorySCD] pph)

Total\_Rows: 1

--g. What is the price history for “HL Road Frame - Red, 62”?

SELECT ph.[ProductID], ph.[ProductName], ph.[ListPrice],

ph.[scd\_start], ph.[scd\_version], ph.[scd\_active]

FROM [dbo].[ProductPriceHistorySCD] ph

WHERE ph.[ProductName] = 'HL Road Frame - Red, 62'

Total\_Rows: 4

--h. How many products had a price change in 2020?

SELECT COUNT(DISTINCT pc.[ProductID]) AS Price\_Change\_In\_2020

FROM (SELECT pr.[ProductID], pr.[ProductName], pr.[ListPrice],

pr.[scd\_start], pr.[scd\_version], pr.[scd\_active]

FROM [dbo].[ProductPriceHistorySCD] pr

WHERE YEAR(scd\_end) = 2020) as pc  
Total\_Rows: 1