**-- Example 27.1**

USE sample;

SELECT \* INTO FactInternetSales

FROM AdventureWorksDW.dbo.FactInternetSales;

GO

CREATE CLUSTERED COLUMNSTORE INDEX

cl\_factinternetsales ON FactInternetSales

WITH ( DATA\_COMPRESSION = COLUMNSTORE);

**-- Example 27.2**

USE sample;

GO

DROP INDEX

cl\_factinternetsales ON factinternetsales;

GO

CREATE NONCLUSTERED COLUMNSTORE INDEX cs\_index1

ON FactInternetSales (OrderDateKey, ShipDateKey, UnitPrice);

**-- Example 27.3**

USE sample;

CREATE NONCLUSTERED COLUMNSTORE INDEX i1 ON

FactInternetSales (UnitPrice)

WHERE OrderDateKey IS NULL;

**-- Example 27.4**

SELECT i.name, p.object\_id, p.index\_id, i.type\_desc,

COUNT(\*) AS number\_of\_segments

FROM sys.column\_store\_segments AS s

INNER JOIN sys.partitions AS p

ON s.hobt\_id = p.hobt\_id

INNER JOIN sys.indexes AS i

ON p.object\_id = i.object\_id

WHERE i.type = 6

GROUP BY i.name, p.object\_id, p.index\_id, i.type\_desc ;

**-- Example 27.5**

USE sample;

SELECT i.object\_id, o.name,

i.name AS IndexName, i.index\_id, i.type\_desc

FROM sys.indexes AS i

JOIN sys.column\_store\_row\_groups AS row\_group

ON i.object\_id = row\_group.object\_id

JOIN sys.objects o ON i.object\_id = o.object\_id

AND i.index\_id = row\_group.index\_id;

**-- Example 27.6**

USE AdventureworksDW2016\_EXT

GO

DBCC DROPCLEANBUFFERS

SET STATISTICS IO ON

SET STATISTICS TIME ON

SELECT s.SalesTerritoryRegion, SUM(f.SalesAmount) 'Total\_Sales',

COUNT(distinct f.Resellerkey) as 'Resellers'

FROM FactResellerSalesXL\_PageCompressed f

INNER JOIN DimDate d ON f.OrderDateKey= d.Datekey

INNER JOIN DimSalesTerritory s on s.SalesTerritoryKey=f.SalesTerritoryKey

INNER JOIN DimEmployee e on e.EmployeeKey=f.EmployeeKey

WHERE FullDateAlternateKey between '1/1/2015' and '1/1/2017'

GROUP BY s.SalesTerritoryRegion

ORDER BY Total\_Sales

SET STATISTICS IO OFF

SET STATISTICS TIME OFF;

**-- Example 27.7**

USE AdventureworksDW2016\_EXT

DBCC DROPCLEANBUFFERS

SET STATISTICS IO ON

SET STATISTICS TIME ON

SELECT s.SalesTerritoryRegion, SUM(f.SalesAmount) 'Total\_Sales',

COUNT(distinct f.Resellerkey) as 'Resellers'

FROM FactResellerSalesXL\_CCI f

INNER JOIN dbo.DimDate d ON f.OrderDateKey= d.Datekey

INNER JOIN dbo.DimSalesTerritory s on s.SalesTerritoryKey=f.SalesTerritoryKey

INNER JOIN dbo.DimEmployee e on e.EmployeeKey=f.EmployeeKey

WHERE FullDateAlternateKey between '1/1/2015' and '1/1/2017'

GROUP BY s.SalesTerritoryRegion

ORDER BY Total\_Sales

SET STATISTICS IO OFF

SET STATISTICS TIME OFF;

**-- Example 27.8**

USE sample;

SELECT \* INTO FactInternetSales

FROM AdventureWorksDW.dbo.FactInternetSales;

GO

INSERT INTO FactInternetSales

SELECT \* FROM AdventureWorksDW.dbo.FactInternetSales;

GO 6

**-- Example 27.9**

USE sample;

SELECT \* INTO DimCustomer

FROM AdventureWorksDW.dbo.DimCustomer;

GO

SELECT \* INTO DimDate

FROM AdventureWorksDW.dbo.DimDate;

**-- Example 27.10**

USE sample;

CREATE NONCLUSTERED COLUMNSTORE INDEX CLI\_CS\_IFactInternetSales

ON dbo.FactInternetSales(OrderDateKey, CustomerKey, SalesAmount);

**-- Example 27.11**

EXEC sp\_configure 'show advanced options', 1;

GO

RECONFIGURE WITH OVERRIDE;

GO

EXEC sp\_configure 'max degree of parallelism', 4;

GO

RECONFIGURE WITH OVERRIDE;

GO

**-- Example 27.12**

USE sample;

SELECT c.CommuteDistance, d.CalendarYear,

SUM(f.SalesAmount) TotalSales

FROM dbo.FactInternetSales as f

INNER JOIN dbo.DimCustomer as c ON

f.CustomerKey = c.CustomerKey

INNER JOIN dbo.DimDate d ON

d.DateKey = f.OrderDateKey

GROUP BY c.CommuteDistance, d.CalendarYear;