

Sri Lankan Institute of Information Technology



Data Warehousing and Business Intelligence
(IT3021)

1.6 million UK traffic accidents

Assignment 1

Submitted to

Sri Lanka Institute of Information Technology

Bachelor of Science Special Honors Degree in Data Science

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01.Data Set Selection

i. Background

I have chosen 1.6 million UK traffic accidents data set of UK government amassed traffic data from 2000-2016. But here I have only used data from 2012 – 2014, because of complexity. As well as I have done some modifications accordingly to the data set derived from source.

Here includes details about driver who involves the accident, the place of accident (hierarchical data like location, city and region), what kind of road did the accident happened, what were the condition when the accident occurred, and all the information about the accident is discussed in my data set.

ii. Content

The selected data source link is mentioned below. It is a collection of transactional data.

<https://www.kaggle.com/daveianhickey/2000-16-traffic-flow-england-scotland-wales>

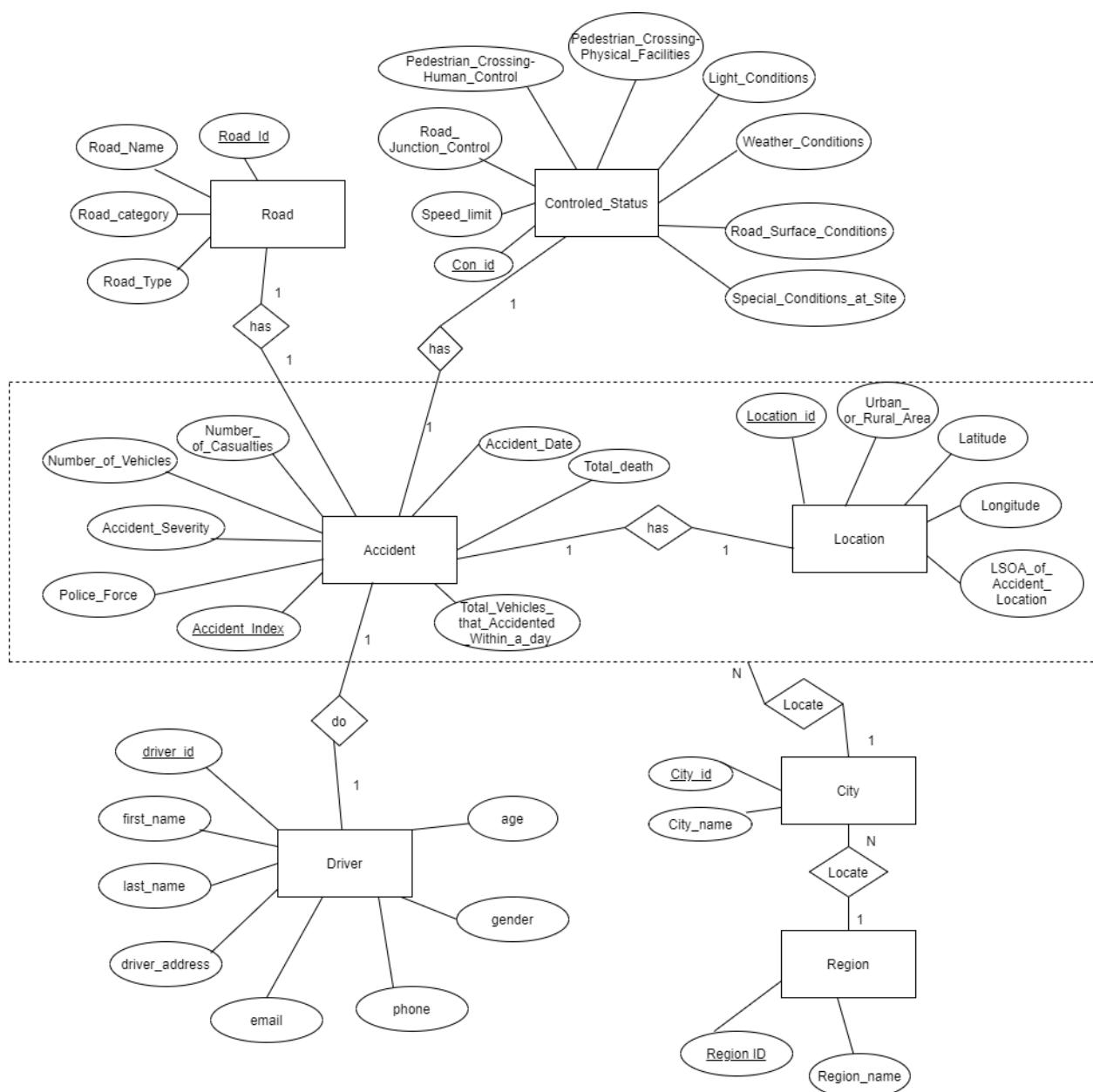
The following are the tables of the dataset.

- Accident
- Road
- Controlled_Status
- Driver
- Location
- City
- Region

The following are the dimensions of the dataset.

- DimAccidentLocation
- DimCity
- DimControlled_Status
- DimDate
- DimDriver
- DimRegion
- DimRoad
- FactAccidentTbl

iii. ER Diagram



This ER diagram shows the connection between the entities in the data set

02.Preparation of Data Sources

I have extracted two types of data sources for my data extraction. Because we need to prepare multiple data sources for completing this task.

Sources

- Excel files (.csv) – driver.csv

accident.csv,

road.csv,

accident_location.csv

city.csv,

region.csv

THIS FILES ARE UNDER SQL DATABASE SOURCE TYPE

- Text file (.txt) - controled_status.txt

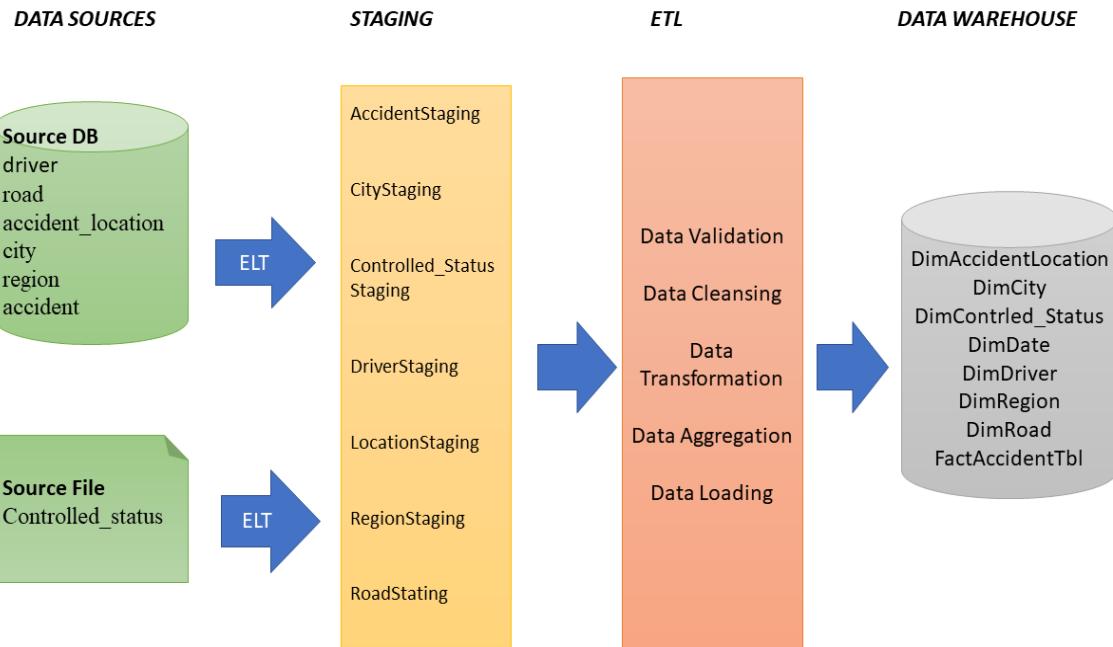
THIS FILE IS UNDER TEXT SOURCE TYPE

Table Name	Columns	Description
driver	driver_id	Details about driver who involves the accident
	first_name	
	last_name	
	driver_address	
	email	
	phone	
	gender	
	age	
road	Road_Id	Details about what kind of road did the accident happened
	Road_Name	
	Road_category	
	Road_Type	
accident_location	Location_id	

	LSOA_of_Accident_Location Longitude Latitude Urban_or_Rural_Area CityID	The details of place of accident(location)
city	City_id	The details of that accident location is situated in which city
	City_name	
	RegionID	
region	Region_ID	The details of that city is located in which region
	Region_name	
accident	Accident_Index	All the transactional details of accident
	Police_Force	
	Accident_Severity	
	Number_of_Vehicles	
	Number_of_Casualties	
	Road_ID	
	Conditions_ID	
	Accident_Date	
	Total_Vehicles_that_Accidented_Within_a_day	
	Total_death	
	Driver_id	
	Location_ID	
Controlled_status	Con_id	Details of what were the condition when the accident occurred
	Speed_limit	
	Road_Junction_Control	
	Pedestrian_Crossing-Human_Control	
	Pedestrian_Crossing-Physical_Facilities	
	Light_Conditions	
	Weather_Conditions	
	Road_Surface_Conditions	
	Special_Conditions_at_Site	

As mentioned here I have divided my data set into seven table with a meaning.

03.Solution Architecture



Data Sources

According to my scenario I have user two types of sources as mentioned before. My first step was finding data set source and divided data set into that two types of sources.

ETL

In here I was loading data and cleansing

Staging

Second step was staging data sources. After creating staging layer above mentioned staging tables were created.

Extract, Transformation and Load (ETL)

Extract = Reading data from external data sources and loading into staging table.

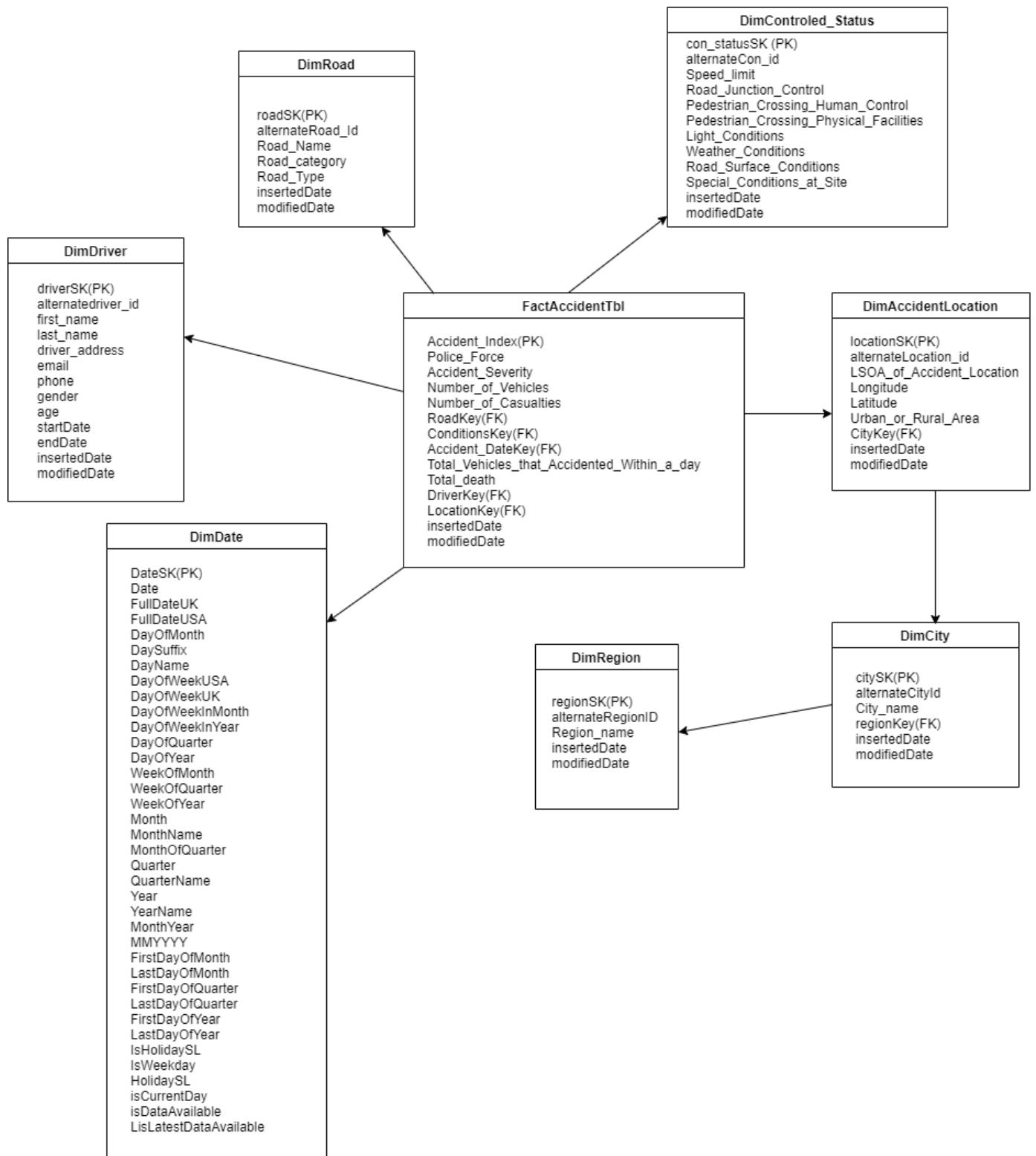
Transformation = Combine data here came into multiple staging tables and duplicating

Load = Loading data into destination using primary key assignment or surrogate key assignment as well as check foreign key constraint and indexing.

Data Warehouse

Dimensional Modelling = Facts and dimension table were creating as above diagram.

04. Data Warehouse Design & Development



After I have found a data set, first I studied it. Then I have thought the scenario according to the scenario when dividing tables. My next step was, design the ER diagram and find a schema. Because we must use different types of schemas according to our data sources and relationships. While I design the ER diagram, I have understood the best schema is **snowflake** for creating a warehouse for my project. Because of Hierarchies for the dimension are divided into separate table, Normalized data structures, Low level of data redundancy, Multiple joins are required to create the relationship between the fact and the dimensional entity, contains a fact table surrounded by dimension tables and which are in turn surrounded by more dimension tables.

Then I have divided my data set into seven tables and eight-dimension tables using my scenario. As I have mentioned before my tables was, **Accident, Road, Controlled_Status, Driver, Location, City, Region**

Now I describe about my dimension tables.

DimAccidentLocation – In this dimension table has included more details of accident locations and its primary key is locationSK and foreign key is CityKey with 1: N relationship.

DimCity – In this dimension table has included more details of cities. It means accident location is situated in which city. Here primary key is citySK and foreign key is regionKey with 1: N relationship.

DimRegion – In this dimension table has included more details of regions. It means city is located in which region of UK. Primary key of this dimension table is regionSK.

DimDate – In this dimension has included date details of accident. Primary key of date dimension is dateSK.

DimDriver- This dimension table describes details of all the drivers who faced the accident. Primary key of date dimension is driverSK. As well as DimDriver is my Slowly dimension.

DimRoad – This dimension table has described of all the Road details of accident. It means where the road is that accident was happened. Primary key of road dimension is roadSK.

DimControlled_Status – This dimension table describes details of conditions while accident was happened.

FactAccidentTbl – I have only one fact table and it describes all the transactional details after accident was happened. Primary Key of fact table is Accident_Index. There is details about number of Police_Force, Accident_Severity , Number_of_Vehicles Number_of_Casualties, Total_Vehicles_that_Accidented_Within_a_day, Total_death, and Accident_Date. This table has relations to DimRoad, DimControlled_Status, DimDate, Dim Driver and DimAccidnet_Location.

Assumptions

I assume that one accident has been mainly happened by only one driver. DimDriver is slowly changing dimension.

05. ETL Development

ETL (Extract Transform Load)

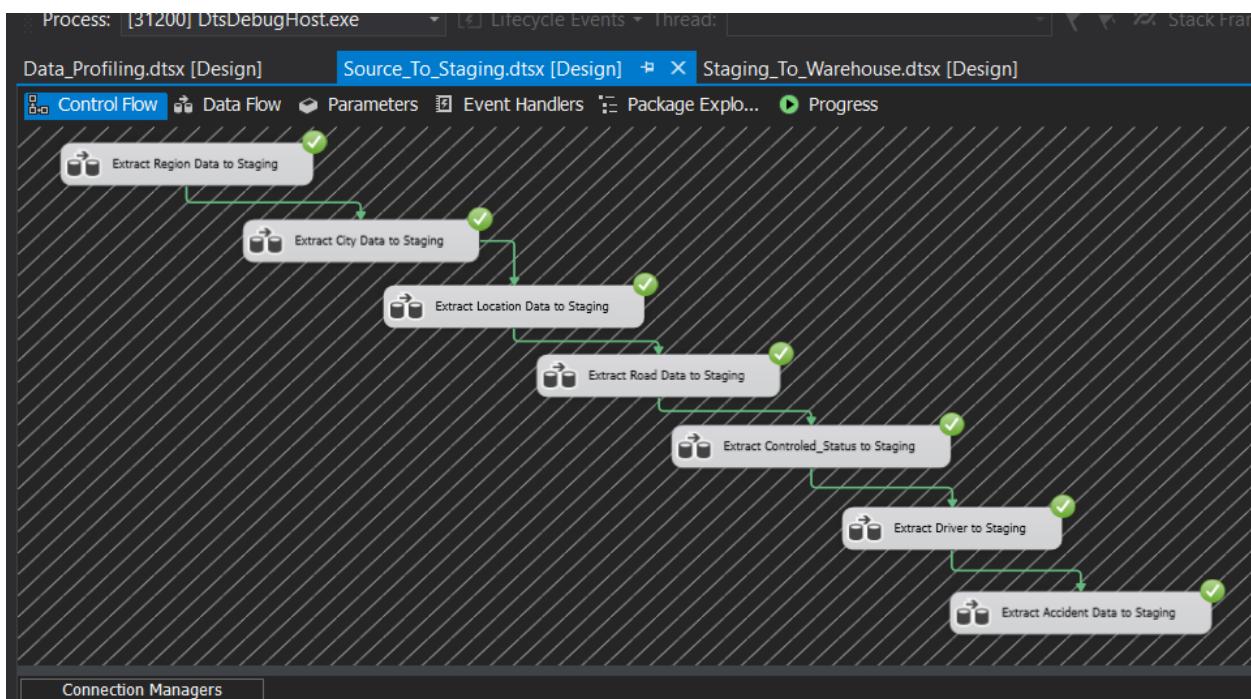
In data warehousing, we use ETL for loading data from source to staging. As well as ETL process is using to apply some changes according to our scenario(cleaning). After storing the source data to staging ETL process use to validate the data, cleaning the data, transform the data, aggregate data and load data before creating a warehouse using snowflake schema.

Extract and Staging

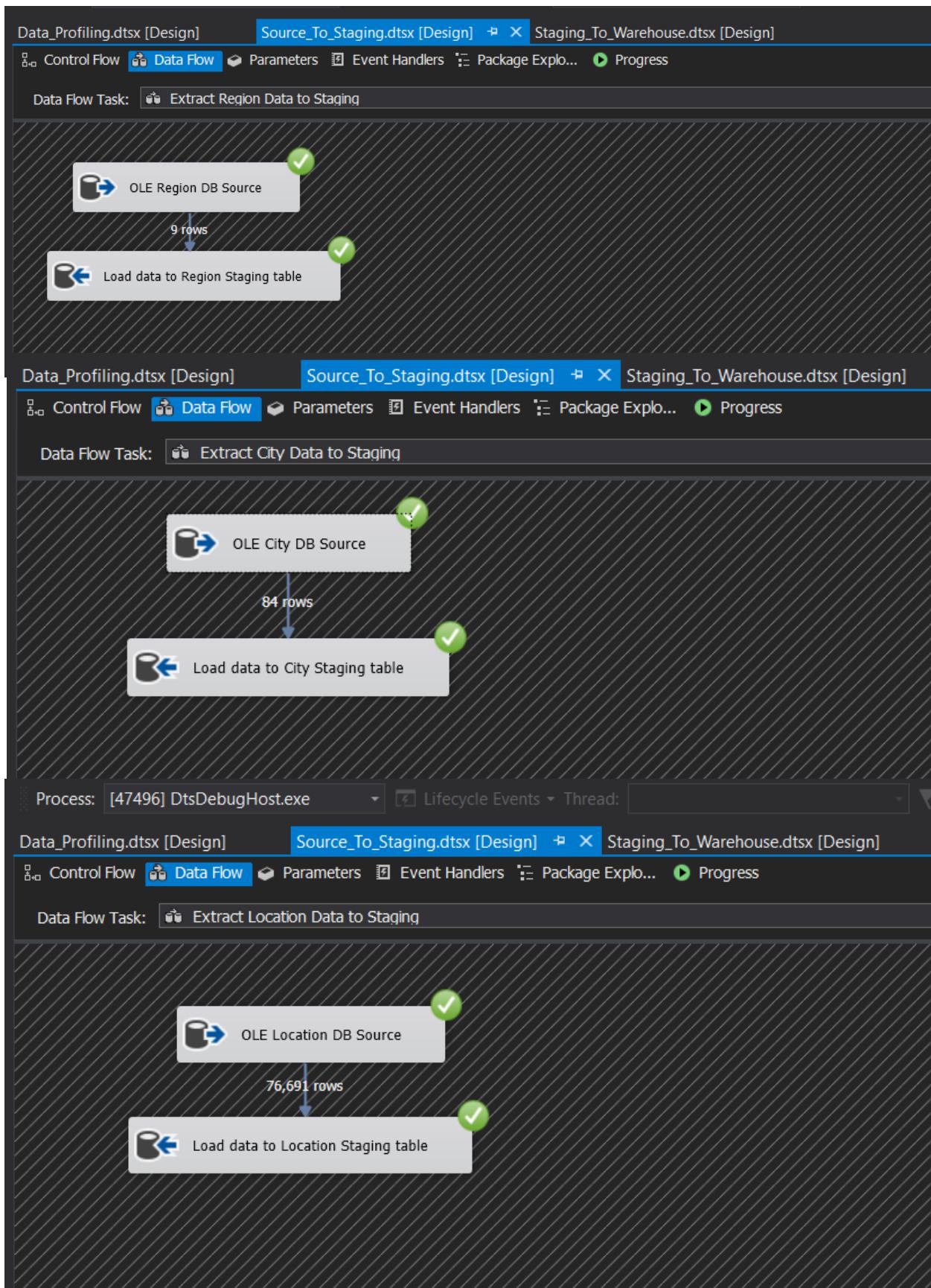
First main objective extract is store data from source and loading into staging layer. I have inserted excel files(.csv) for Accident_Source database and text files(.txt).

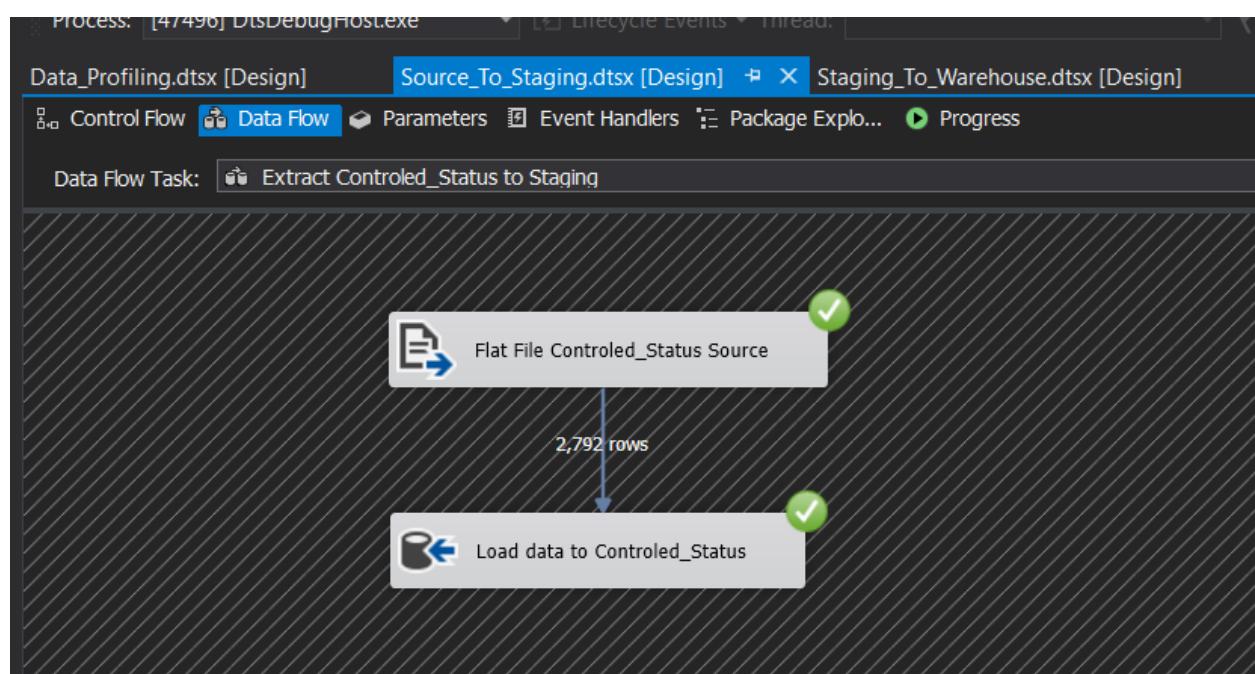
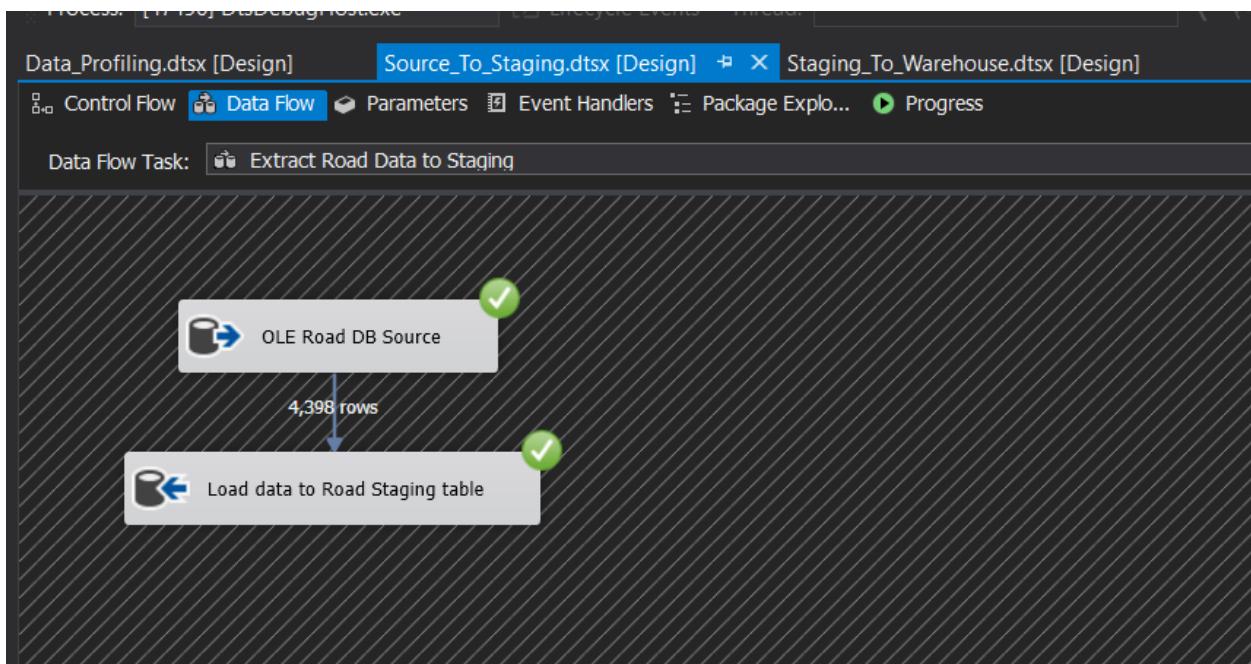
After inserting source files, my next step was load data to Accident_Staging database.

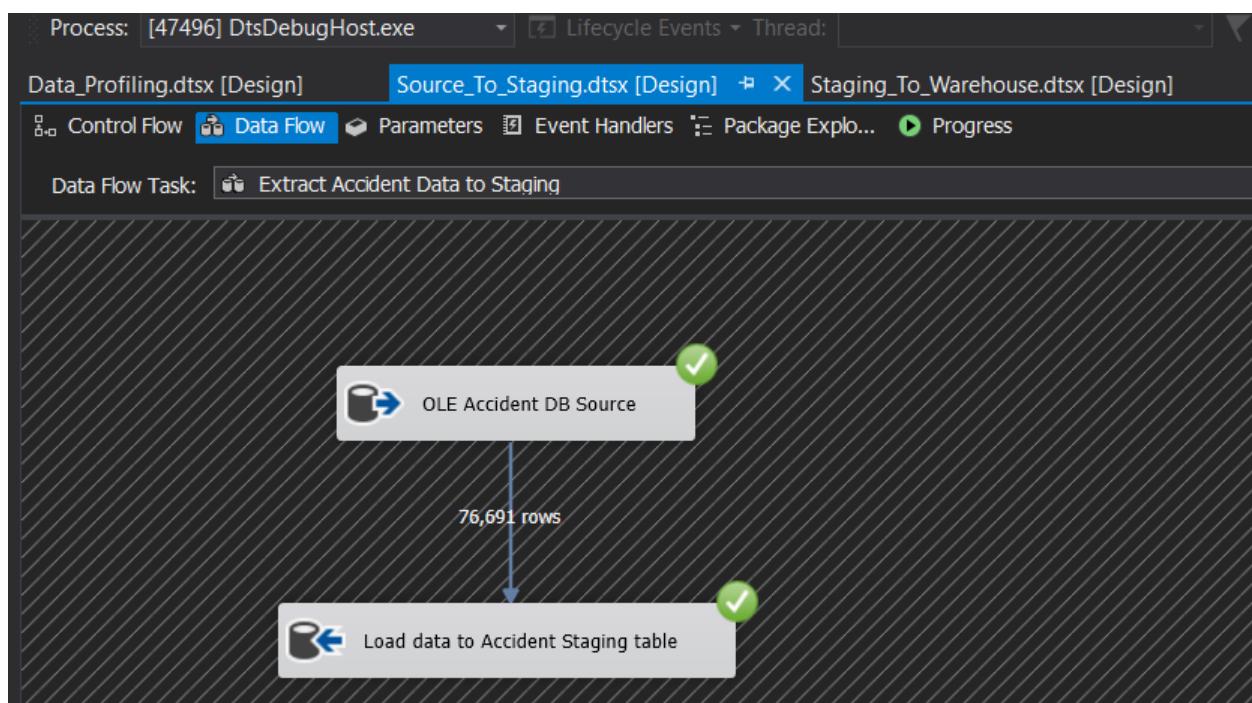
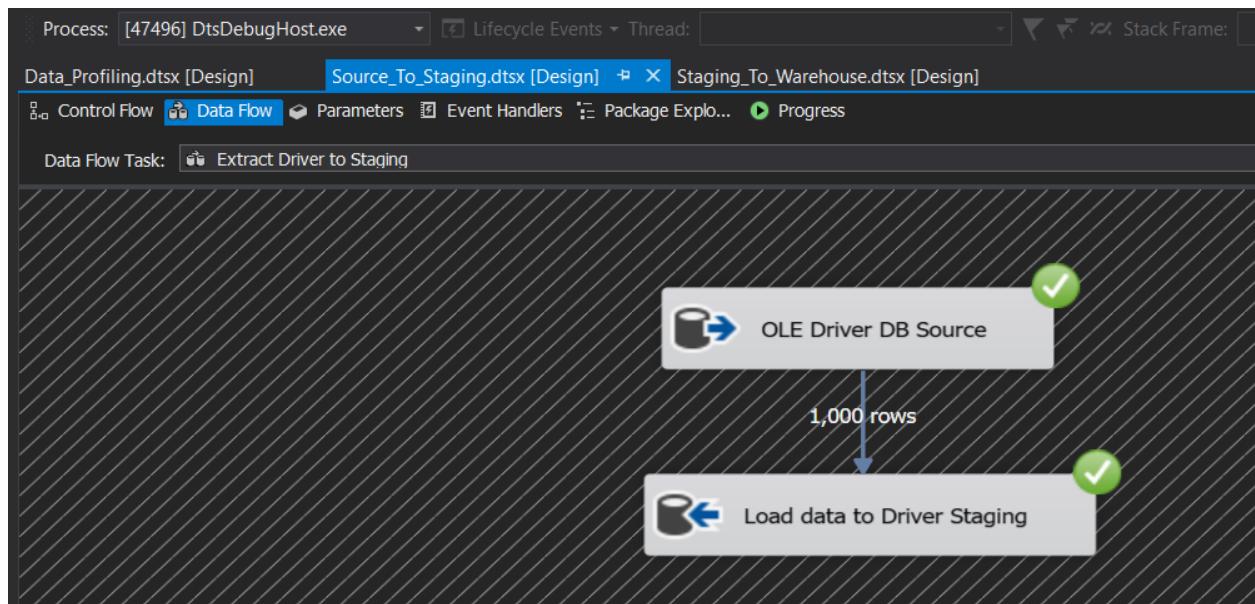
Extract data from sources to staging table.



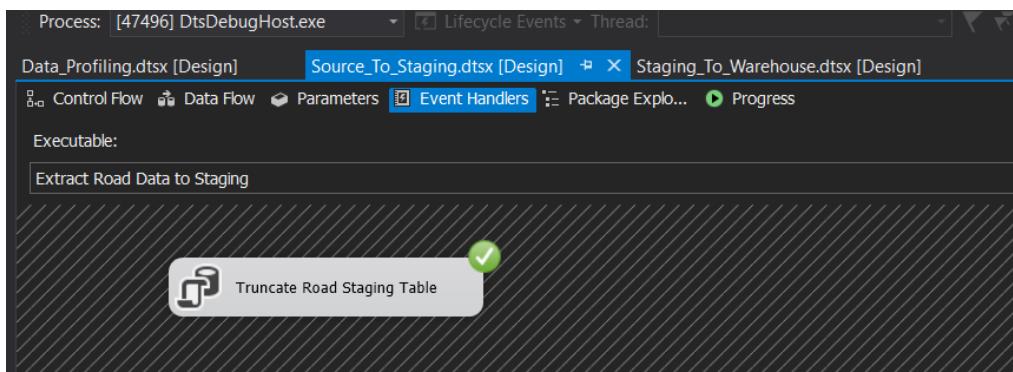
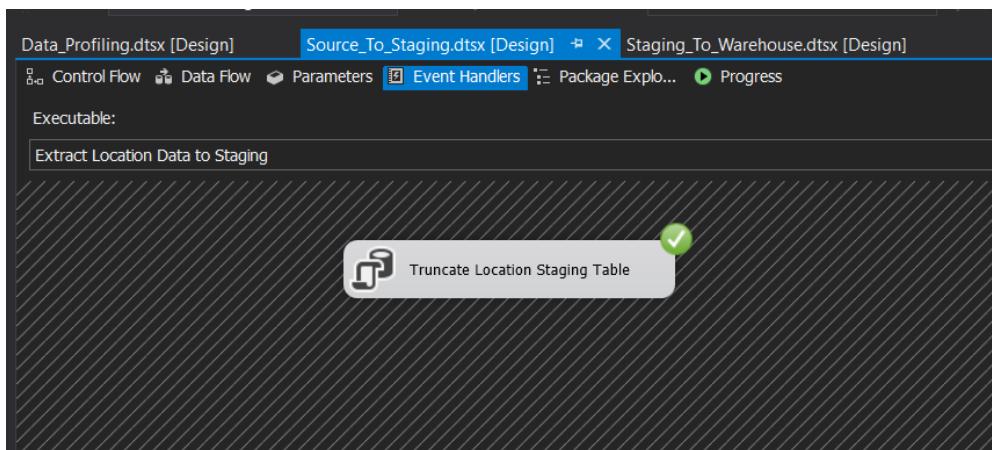
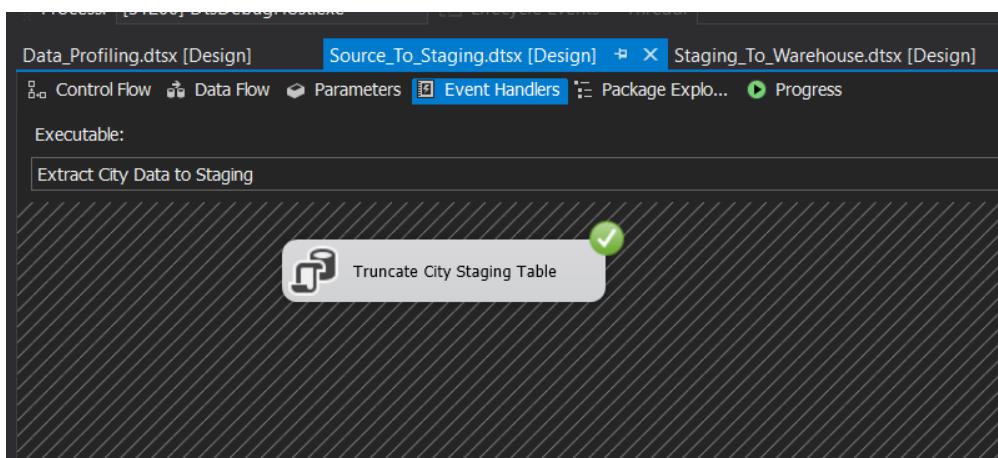
Data Flow

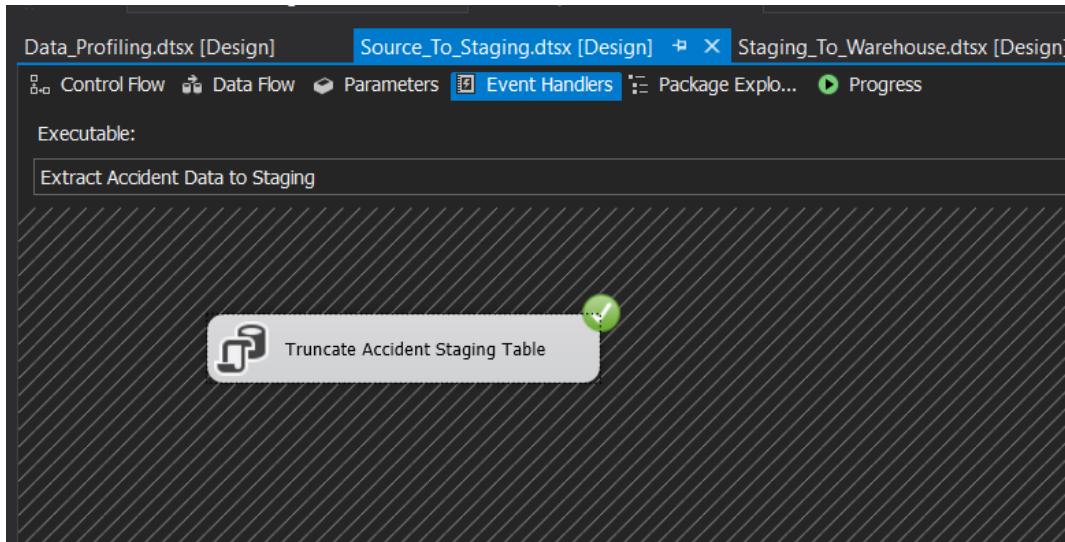
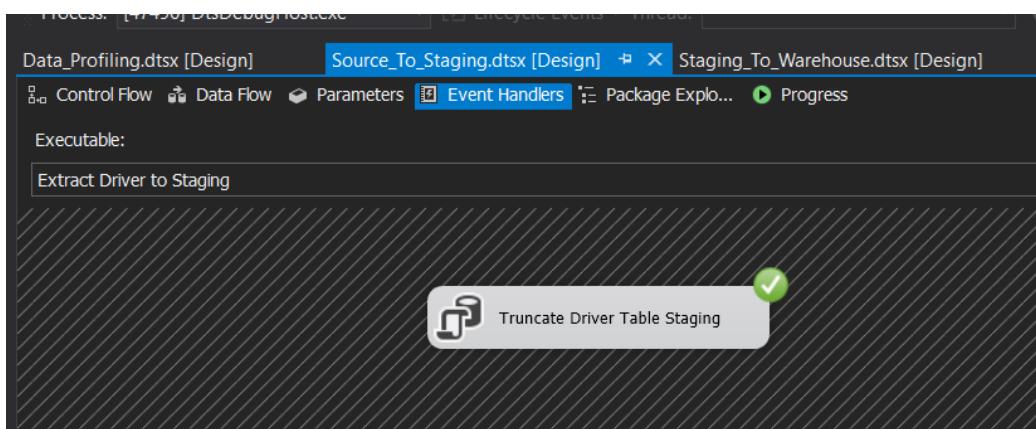
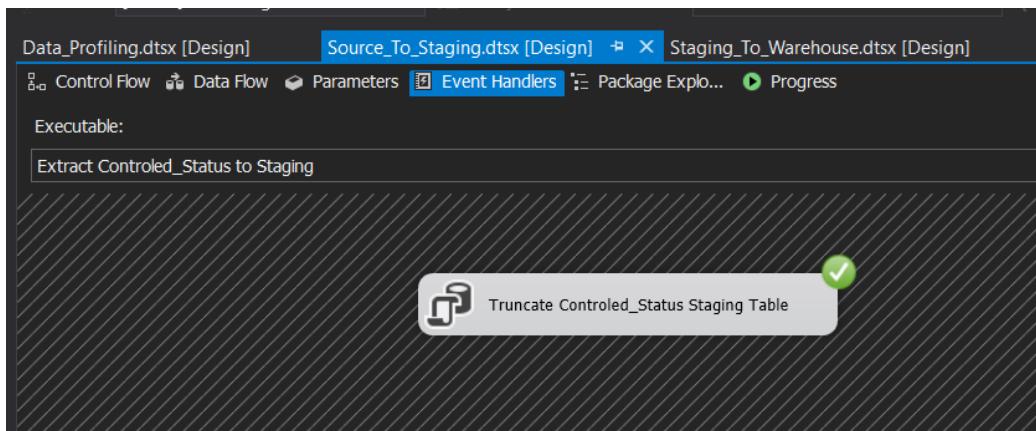






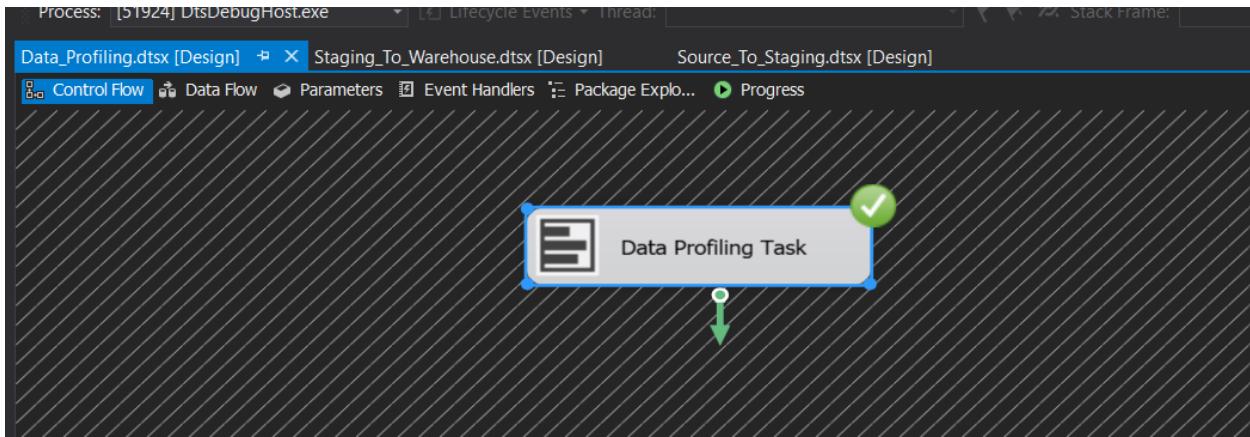
Truncate Tables





Data Profiling

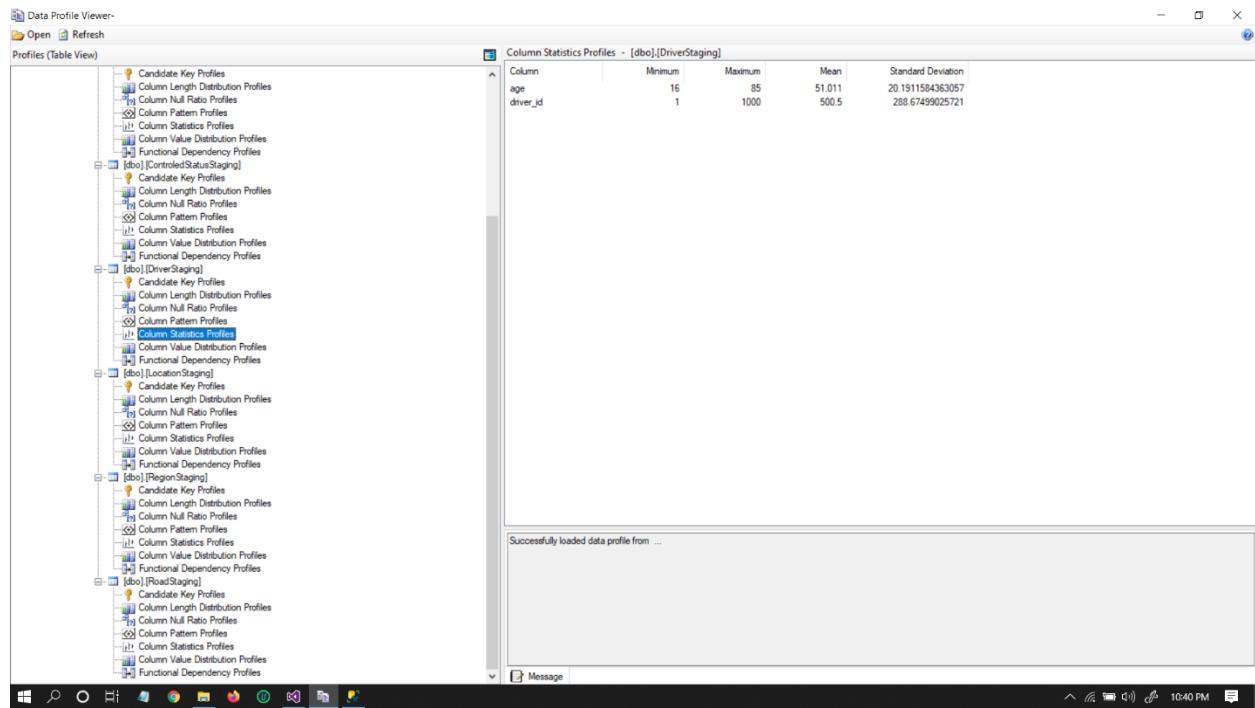
Before we are creating a warehouse, we should check our quality of data sources. There are many factors determine data quality. Those are completeness, consistency, uniqueness, timeliness, etc. As well as we analyze the data itself.



The screenshot shows the Data Profile Viewer interface. On the left, a tree view displays data sources, databases, tables, and various profile types (Candidate Key Profiles, Column Length Distribution Profiles, etc.) for the 'Accident_Staging' table in the 'dbo' schema. On the right, a detailed view of the 'Column Value Distribution Profiles - [dbo].[AccidentStaging]' is shown. It includes a table with 'Column' and 'Number Of Distinct Values' (e.g., Accident_Date: 576, Accident_Index: 76951) and a bar chart titled 'Frequent Value Distribution (0.1000 %) - Accident_Date' showing the count and percentage of frequent values for dates from 4/21/2012 to 9/29/2012.

Column	Number Of Distinct Values
Accident_Date	576
Accident_Index	76951
Accident_Severity	3
Conditions_ID	2793
Driver_id	1000

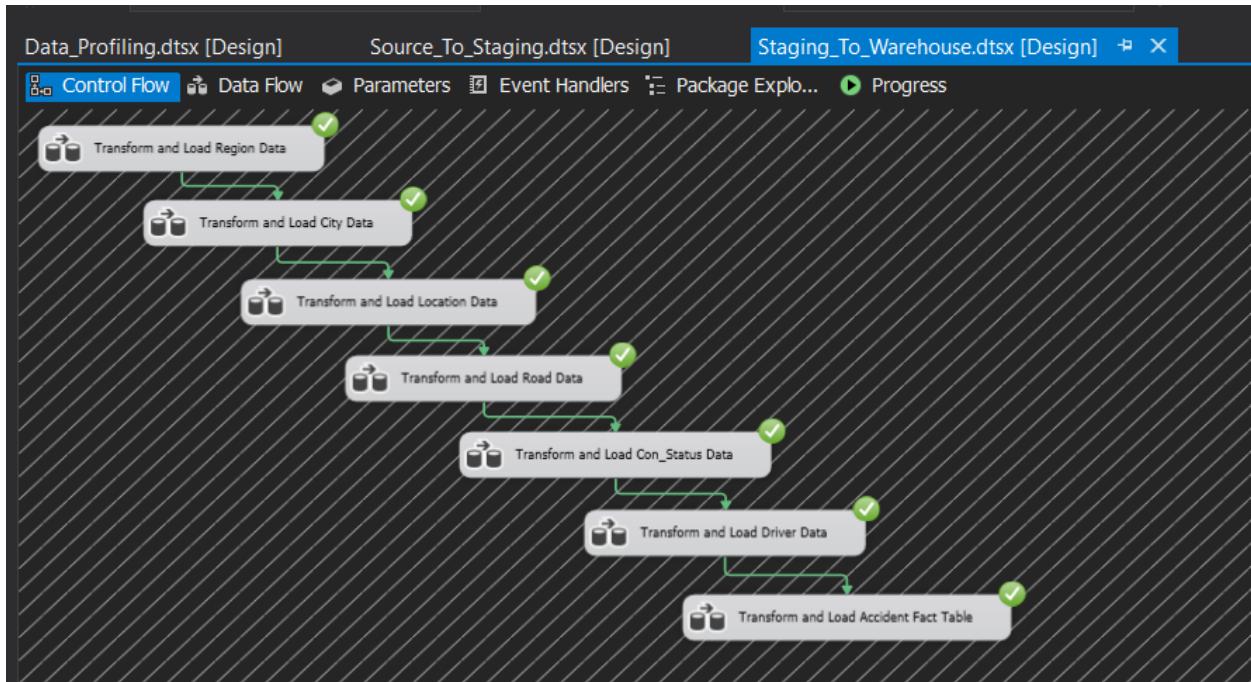
Value	Count	Percentage
4/21/2012 12:00:00 AM	464	0.6050 %
5/24/2012 12:00:00 AM	78	0.1017 %
7/24/2013 12:00:00 AM	78	0.1017 %
8/26/2012 12:00:00 AM	78	0.1017 %
3/29/2013 12:00:00 AM	77	0.1004 %
2/24/2014 12:00:00 AM	77	0.1004 %
6/16/2012 12:00:00 AM	155	0.2021 %
10/7/2013 12:00:00 AM	154	0.2008 %
2/22/2012 12:00:00 AM	154	0.2008 %
12/17/2013 12:00:00 AM	77	0.1004 %
10/24/2013 12:00:00 AM	233	0.3038 %
1/30/2012 12:00:00 AM	154	0.2008 %
2/1/2014 12:00:00 AM	78	0.1017 %
4/8/2012 12:00:00 AM	231	0.3012 %
9/29/2012 12:00:00 AM	78	0.1017 %



Here I have checked all the tables and columns and all the data.

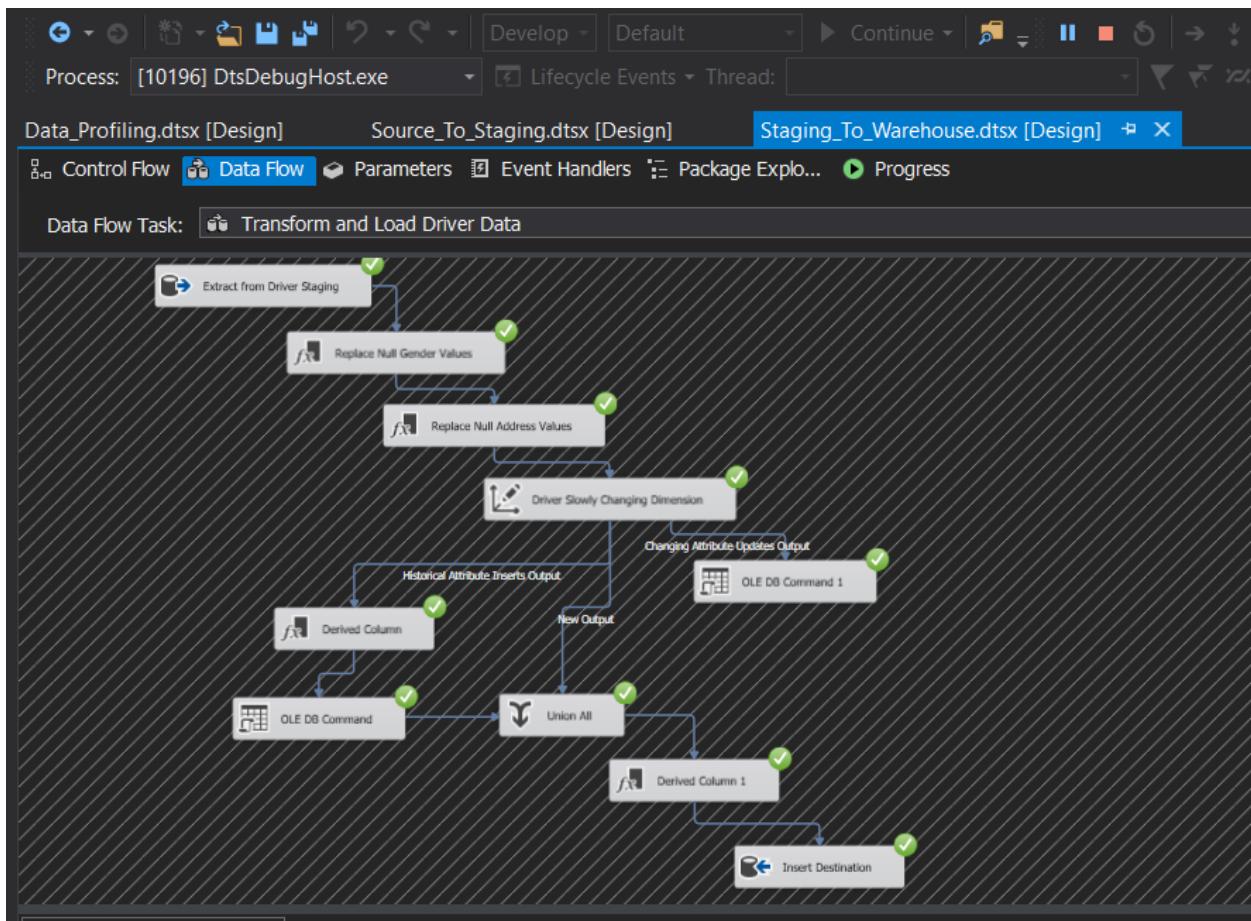
Data Transformation

Transformation data flow component to perform aggregation, sorting, merging, modifying, joining and distributing the data.



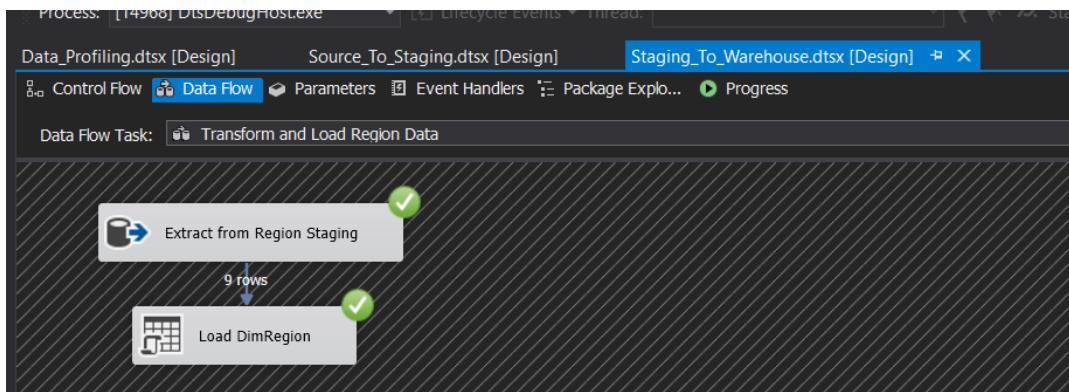
DimDriver

After extracting data from driver staging table, it was check null values and start to data cleansing steps for gender of the customer and address of the customer. There were some derived columns as gender and address. After that making the driver dimension a slowly changing dimension. Lastly load to driver dimension.



DimRegion

Next data was loaded from RegionStaging to DimRegion.



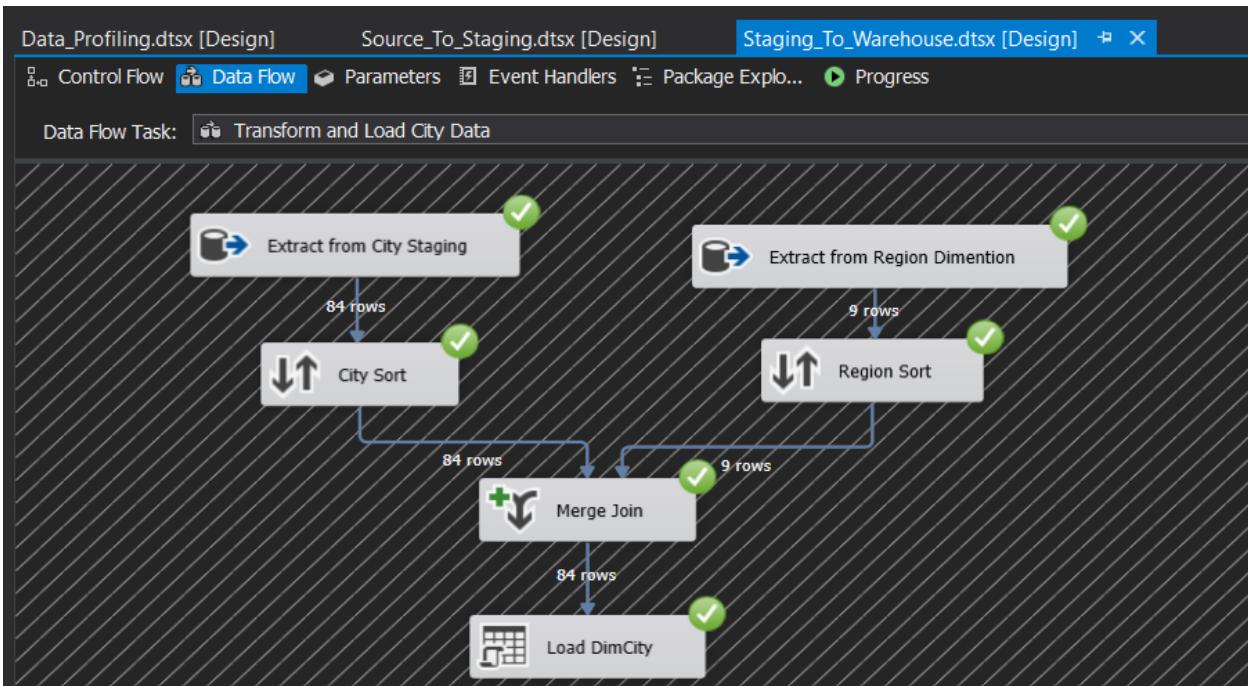
The stored procedure for DimRegion

The screenshot shows the Microsoft SQL Server Management Studio (SSMS) interface. On the left, the Object Explorer pane is open, showing the database structure for 'Accident_Warehouse'. In the center, a query results window displays the script for the stored procedure 'dbo.[UpdateDimRegion]'. The script is as follows:

```
USE [Accident_Warehouse]
GO
/*===== Object: StoredProcedure [dbo].[UpdateDimRegion] Script Date: 5/13/2021 9:39:12 PM =====*/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
ALTER PROCEDURE [dbo].[UpdateDimRegion]
@alternateRegionID int,
@Region_name nvarchar(50)
as
begin
if not exists (select regionSK from dbo.DimRegion where alternateRegionID = @alternateRegionID )
begin
insert into dbo.DimRegion (alternateRegionID,Region_name,insertedDate,modifiedDate)
values (@alternateRegionID,@Region_name,GETDATE(),GETDATE())
end;
if exists (select regionSK from dbo.DimRegion where alternateRegionID = @alternateRegionID )
begin
update dbo.DimRegion
set alternateRegionID = @alternateRegionID ,Region_name = @Region_name ,modifiedDate = GETDATE()
where alternateRegionID = @alternateRegionID
end;
end;
```

The status bar at the bottom indicates 'Connected (1/1)', 'Ln 1 Col 1 Ch 1 INS', and the time '9:39 PM'.

DimCity



Next data was loaded from CityStaging to DimCity(Dimension).

Here I have used sort and merge join for combining the region and city dimensions.

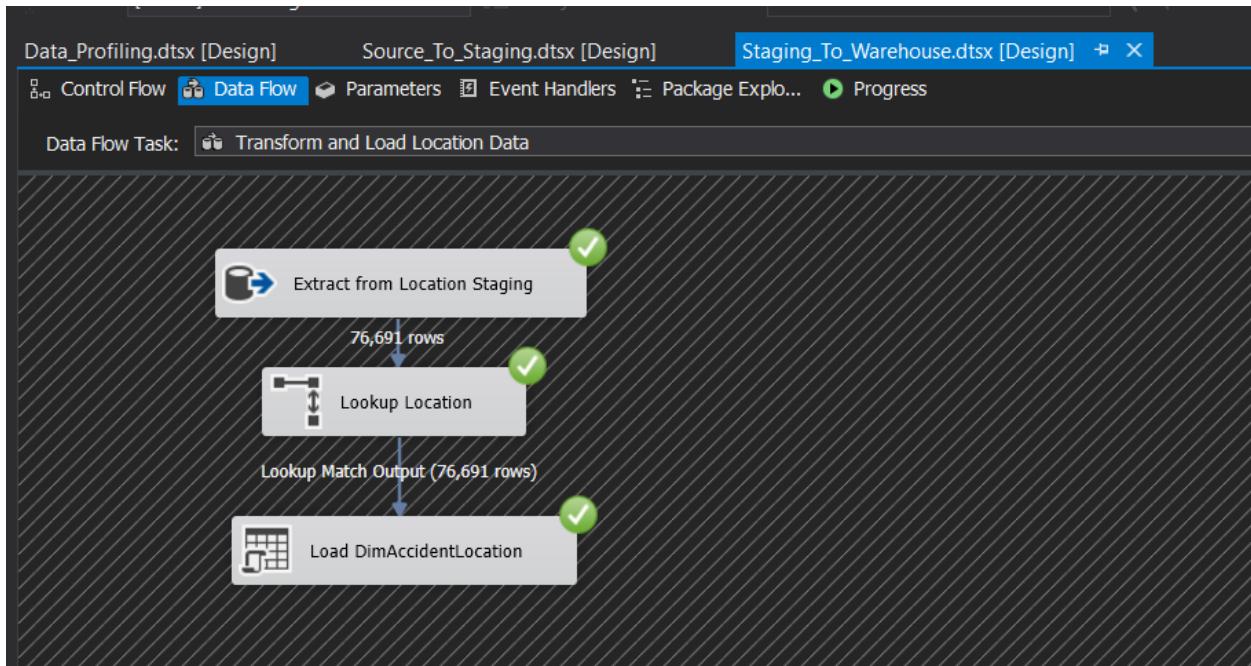
Before loading data I have executed update stored procedure for city.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left lists database objects under 'Accident_Warehouse'. The central pane displays a stored procedure script named 'UpdateDimCity'.

```
ALTER PROCEDURE [dbo].[UpdateDimCity]
@alternateCityId int,
@City_name nvarchar(50),
@regionKey int
as
begin
if not exists (select citySK from dbo.DimCity where alternateCityId = @alternateCityId )
begin
insert into dbo.DimCity (alternateCityId,City_name,regionKey,insertedDate,modifiedDate)
values (@alternateCityId,@City_name,@regionKey,GETDATE(),GETDATE())
end;
if exists (select citySK from dbo.DimCity where alternateCityId = @alternateCityId )
begin
update dbo.DimCity
set alternateCityId = @AlternateCityId,City_name = @City_name, regionKey=@regionKey,modifiedDate = GETDATE()
where alternateCityId = @alternateCityId
end;
end;
```

DimAccidentLocation

Next data was loaded from AccidentLocationStaging to DimAccidentLocation.



Here I have used lookup for combining city and AccidentLocation dimensions.

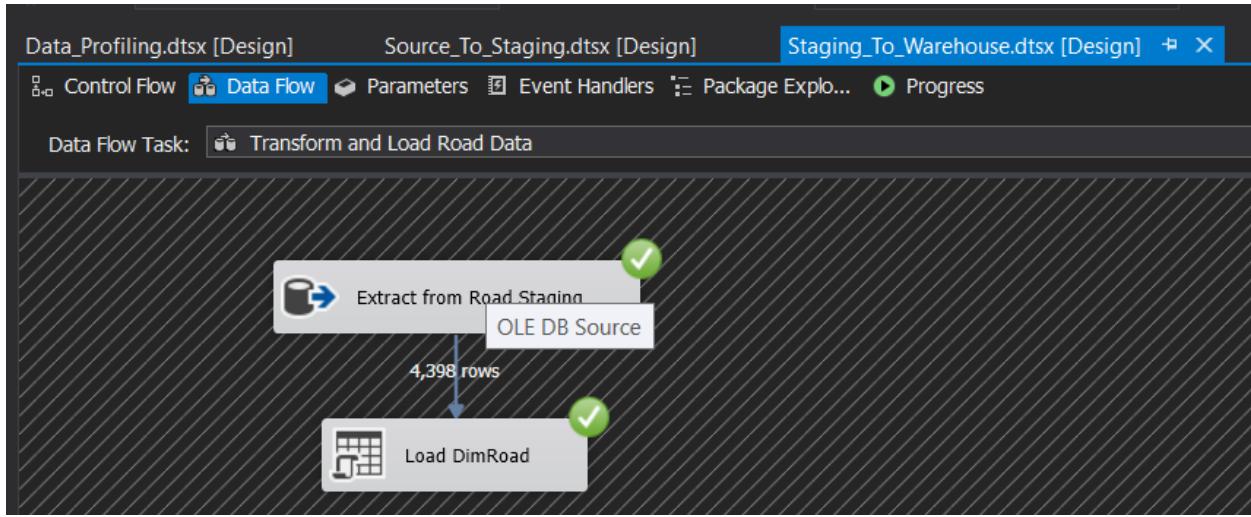
Before loading data, I have executed update stored procedure for accidentLocation.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left lists the database structure, including tables like Accident_Warehouse, LSOA, and DimAccidentLocation. The central pane displays the script for the stored procedure [dbo].[UpdateDimAccidentlocation].

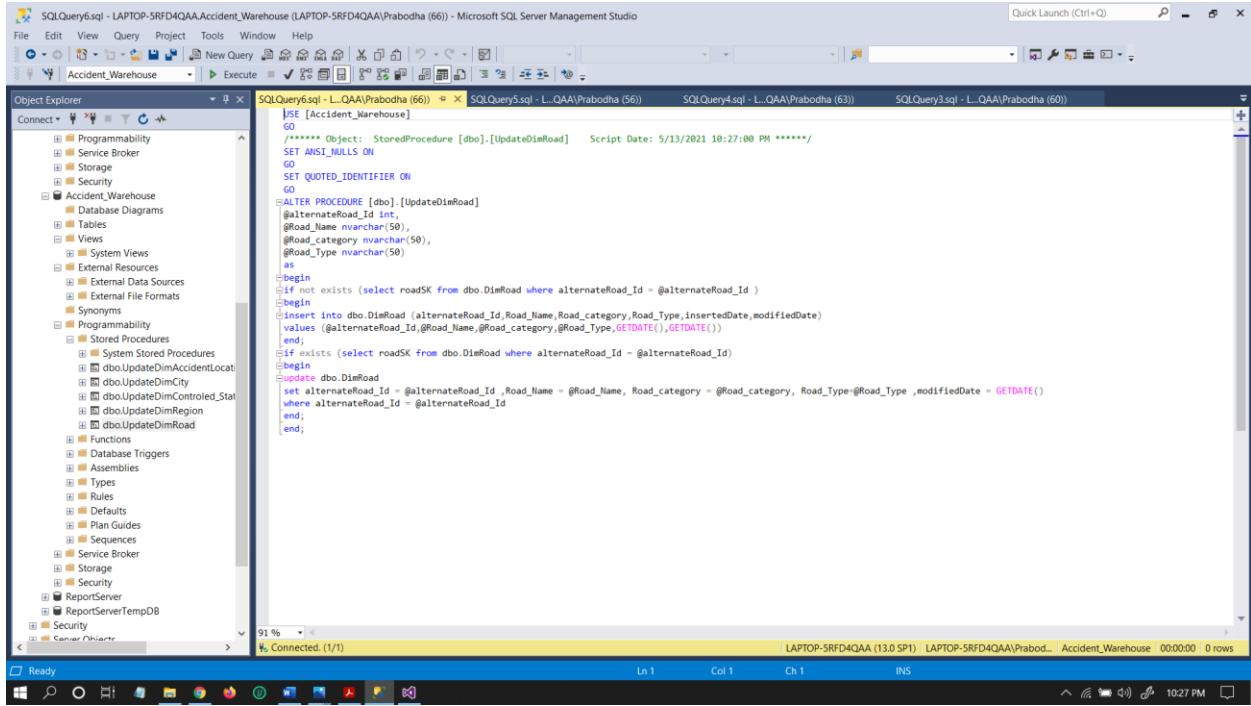
```
USE [Adventure_Warehouse]
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
ALTER PROCEDURE [dbo].[UpdateDimAccidentlocation]
    @alternateLocation_id int,
    @LSOA_of_Accident_Location nvarchar(50),
    @longitude float,
    @latitude float,
    @Urban_or_Rural_Area int,
    @CityKey int
    as
    begin
        if not exists (select locationSK from dbo.DimAccidentLocation where alternateLocation_id = @alternateLocation_id )
        begin
            insert into dbo.DimAccidentLocation (alternateLocation_id,LSOA_of_Accident_Location,Longitude,Latitude,Urban_or_Rural_Area,CityKey,insertedDate,modifiedDate)
            values (@alternateLocation_id,@LSOA_of_Accident_Location ,@longitude,@latitude,@Urban_or_Rural_Area,@CityKey,GETDATE(),GETDATE())
        end;
        if exists (select locationSK from dbo.DimAccidentLocation where alternateLocation_id = @alternateLocation_id)
        begin
            update dbo.DimAccidentLocation
            set alternateLocation_id = @alternateLocation_id ,LSOA_of_Accident_Location = @LSOA_of_Accident_Location ,Longitude = @Longitude, Latitude = @Latitude , Urban_or_Rural_Area = @Urban_Rural_Area
            where alternateLocation_id = @alternateLocation_id
        end;
    end;
```

DimRoad

Next data was loaded from RoadStaging to DimRoad

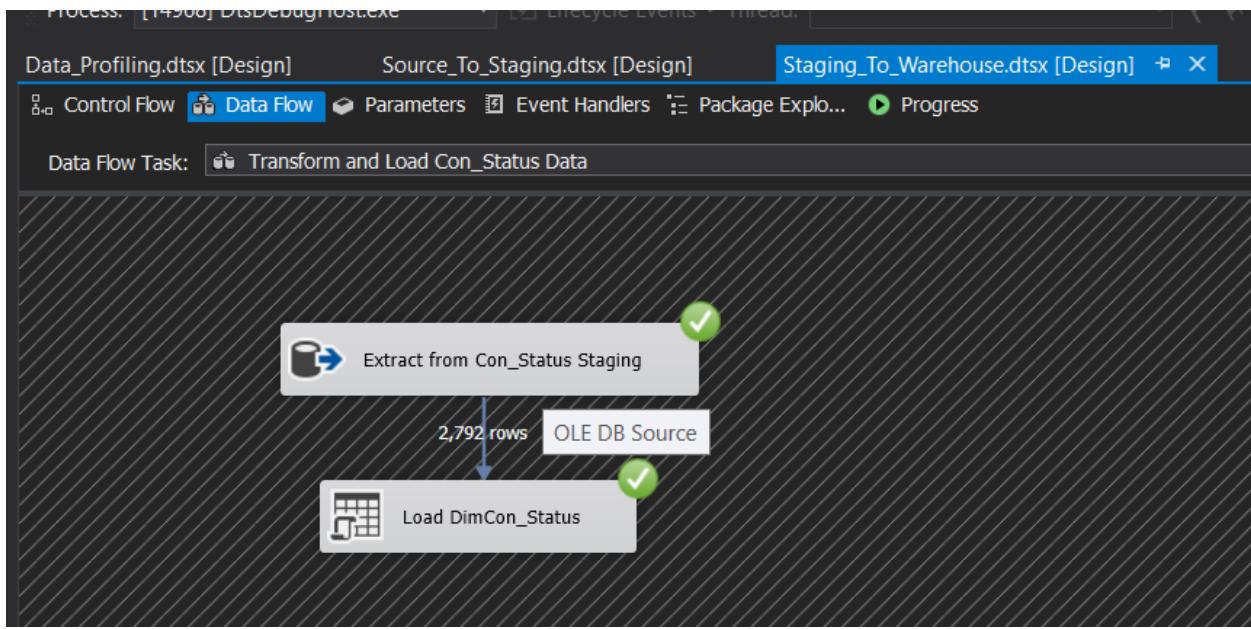


Before loading data, I have executed update stored procedure for road.



DimControlled_Status

Next data was loaded from Controlled_StatusStaging to DimCOntroled_Status



Before loading data, I have executed update stored procedure for road.

The screenshot shows the Microsoft SQL Server Management Studio (SSMS) interface. The Object Explorer on the left shows the database structure for 'Accident_Warehouse'. The central pane displays the script for the stored procedure 'dbo.UpdateDimControlled_Status'. The script is as follows:

```
USE [Adventure_Warehouse]
GO
/*===== Object: StoredProcedure [dbo].[UpdateDimControlled_Status] Script Date: 5/13/2021 10:38:14 PM =====*/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
ALTER PROCEDURE [dbo].[UpdateDimControlled_Status]
@alternateCon_id int,
@speed_limit int,
@Road_Junction_Control nvarchar(50),
@Pedestrian_Crossing_Human_Control nvarchar(50),
@Pedestrian_Crossing_Physical_Facilities nvarchar(50),
@Light_Conditions nvarchar(50),
@Weather_Conditions nvarchar(50),
@Road_Surface_Conditions nvarchar(50),
@Special_Conditions_at_Site nvarchar(50)
as
begin
If not exists (select con_statusSK from dbo.DimControlled_Status where alternateCon_id = @alternateCon_id )
Begin
Insert into dbo.DimControlled_Status (alternateCon_id,Speed_limit,Road_Junction_Control,Pedestrian_Crossing_Human_Control,Pedestrian_Crossing_Physical_Facilities,Light_Conditions,Weather_Conditions,Road_Surface_Conditions,Special_Conditions_at_Site)
values (@alternateCon_id,@speed_limit,@Road_Junction_Control,@Pedestrian_Crossing_Human_Control,@Pedestrian_Crossing_Physical_Facilities,@Light_Conditions,@Weather_Conditions,@Road_Surface_Conditions,@Special_Conditions_at_Site)
End
Else
Begin
Update dbo.DimControlled_Status
set alternateCon_id = @alternateCon_id ,Speed_limit = @Speed_limit, Road_Junction_Control = @Road_Junction_Control, Pedestrian_Crossing_Human_Control=@Pedestrian_Crossing_Human_Con
where alternateCon_id = @alternateCon_id
End;
End;
```

DimDate

This is DimDate create query that I have used to create DimDate dimension table

```
BEGIN TRY
    DROP TABLE [dbo].[DimDate]
END TRY

BEGIN CATCH
    /*No Action*/
END CATCH

/***********************/

CREATE TABLE [dbo].[DimDate]
(
    [DateSK] INT primary key,
    [Date] DATETIME,
    [FullDateUK] CHAR(10), -- Date in dd-MM-yyyy format
    [FullDateUSA] CHAR(10) -- Date in MM-dd-yyyy format
    [DayOfMonth] VARCHAR(2), -- Field will hold day number of Month
    [DaySuffix] VARCHAR(4), -- Apply suffix as 1st, 2nd ,3rd etc
    [DayName] VARCHAR(9), -- Contains name of the day, Sunday, Monday
    [DayOfWeekUSA] CHAR(1),-- First Day Sunday=1 and Saturday=7
    [DayOfWeekUK] CHAR(1),-- First Day Monday=1 and Sunday=7
    [DayOfWeekInMonth] VARCHAR(2), --1st Monday or 2nd Monday in Month
    [DayOfWeekInYear] VARCHAR(2),
    [DayOfQuarter] VARCHAR(3),
    [DayOfYear] VARCHAR(3),
    [WeekOfMonth] VARCHAR(1),-- Week Number of Month
    [WeekOfQuarter] VARCHAR(2), --Week Number of the Quarter
    [WeekOfYear] VARCHAR(2),--Week Number of the Year
    [Month] VARCHAR(2), --Number of the Month 1 to 12
    [MonthName] VARCHAR(9),--January, February etc
    [MonthOfQuarter] VARCHAR(2),-- Month Number belongs to Quarter
    [Quarter] CHAR(1),
    [QuarterName] VARCHAR(9),--First,Second..
    [Year] CHAR(4),-- Year value of Date stored in Row
    [YearName] CHAR(7), --CY 2012,CY 2013
    [MonthYear] CHAR(10), --Jan-2013,Feb-2013
    [MMYYYY] CHAR(6),
    [FirstDayOfMonth] DATE,
    [LastDayOfMonth] DATE,
    [FirstDayOfQuarter] DATE,
    [LastDayOfQuarter] DATE,
    [FirstDayOfYear] DATE,
    [LastDayOfYear] DATE,
    [IsHolidaySL] BIT,-- Flag 1=National Holiday, 0-No National Holiday
    [IsWeekday] BIT,-- 0=Week End ,1=Week Day
    [HolidaySL] VARCHAR(50),--Name of Holiday in US
    [isCurrentDay] int, -- Current day=1 else = 0
    [isDataAvailable] int, -- data available for the day = 1, no data available for the day = 0
    [isLatestDataAvailable] int
)
GO
```

```
/****************/
```

--Specify Start Date and End date here
--Value of Start Date Must be Less than Your End Date

```
DECLARE @StartDate DATETIME = '1/12/2012' --Starting value of Date Range
DECLARE @EndDate DATETIME = '03/11/2014' --End Value of Date Range
```

--Temporary Variables To Hold the Values During Processing of Each Date of Year
DECLARE

```
@DayOfWeekInMonth INT,
@DayOfWeekInYear INT,
@DayOfQuarter INT,
@WeekOfMonth INT,
```

```

    @CurrentYear INT,
    @CurrentMonth INT,
    @CurrentQuarter INT

/*Table Data type to store the day of week count for the month and year*/
DECLARE @DayOfWeek TABLE (DOW INT, MonthCount INT, QuarterCount INT, YearCount INT)

INSERT INTO @DayOfWeek VALUES (1, 0, 0, 0)
INSERT INTO @DayOfWeek VALUES (2, 0, 0, 0)
INSERT INTO @DayOfWeek VALUES (3, 0, 0, 0)
INSERT INTO @DayOfWeek VALUES (4, 0, 0, 0)
INSERT INTO @DayOfWeek VALUES (5, 0, 0, 0)
INSERT INTO @DayOfWeek VALUES (6, 0, 0, 0)
INSERT INTO @DayOfWeek VALUES (7, 0, 0, 0)

```

--Extract and assign various parts of Values from Current Date to Variable

```

DECLARE @CurrentDate AS DATETIME = @StartDate
SET @CurrentMonth = DATEPART(MM, @CurrentDate)
SET @CurrentYear = DATEPART(YY, @CurrentDate)
SET @CurrentQuarter = DATEPART(QQ, @CurrentDate)

```

```

/*********************
```

--Proceed only if Start Date(Current date) is less than End date you specified above

```

WHILE @CurrentDate < @EndDate
BEGIN

```

/*Begin day of week logic*/

```

/*Check for Change in Month of the Current date if Month changed then
Change variable value*/
IF @CurrentMonth != DATEPART(MM, @CurrentDate)
BEGIN
    UPDATE @DayOfWeek
    SET MonthCount = 0
    SET @CurrentMonth = DATEPART(MM, @CurrentDate)
END

```

```

/* Check for Change in Quarter of the Current date if Quarter changed then change
Variable value*/

```

```

IF @CurrentQuarter != DATEPART(QQ, @CurrentDate)
BEGIN
    UPDATE @DayOfWeek
    SET QuarterCount = 0
    SET @CurrentQuarter = DATEPART(QQ, @CurrentDate)
END

```

```

/* Check for Change in Year of the Current date if Year changed then change
Variable value*/

```

```

IF @CurrentYear != DATEPART(YY, @CurrentDate)
BEGIN
    UPDATE @DayOfWeek
    SET YearCount = 0
    SET @CurrentYear = DATEPART(YY, @CurrentDate)
END

```

-- Set values in table data type created above from variables

```

UPDATE @DayOfWeek
SET
    MonthCount = MonthCount + 1,
    QuarterCount = QuarterCount + 1,
    YearCount = YearCount + 1
WHERE DOW = DATEPART(DW, @CurrentDate)

```

```

SELECT

```

```

        @DayOfWeekInMonth = MonthCount,
        @DayOfQuarter = QuarterCount,
        @DayOfWeekInYear = YearCount
    FROM @DayOfWeek
    WHERE DOW = DATEPART(DW, @CurrentDate)

/*End day of week logic*/

/* Populate Your Dimension Table with values*/
INSERT INTO [dbo].[DimDate]
SELECT

    CONVERT (char(8),@CurrentDate,112) as DateKey,
    @CurrentDate AS Date,
    CONVERT (char(10),@CurrentDate,103) as FullDateUK,
    CONVERT (char(10),@CurrentDate,101) as FullDateUSA,
    DATEPART(DD, @CurrentDate) AS DayOfMonth,
    --Apply Suffix values like 1st, 2nd 3rd etc.
    CASE
        WHEN DATEPART(DD,@CurrentDate) IN (11,12,13)
        THEN CAST(DATEPART(DD,@CurrentDate) AS VARCHAR) + 'th'
        WHEN RIGHT(DATEPART(DD,@CurrentDate),1) = 1
        THEN CAST(DATEPART(DD,@CurrentDate) AS VARCHAR) + 'st'
        WHEN RIGHT(DATEPART(DD,@CurrentDate),1) = 2
        THEN CAST(DATEPART(DD,@CurrentDate) AS VARCHAR) + 'nd'
        WHEN RIGHT(DATEPART(DD,@CurrentDate),1) = 3
        THEN CAST(DATEPART(DD,@CurrentDate) AS VARCHAR) + 'rd'
        ELSE CAST(DATEPART(DD,@CurrentDate) AS VARCHAR) + 'th'
    END AS DaySuffix,

    DATENAME(dw, @CurrentDate) AS DayName,
    DATEPART(dw, @CurrentDate) AS DayOfWeekUSA,
    -- check for day of week as Per US and change it as per UK format
    CASE DATEPART(dw, @CurrentDate)
        WHEN 1 THEN 7
        WHEN 2 THEN 1
        WHEN 3 THEN 2
        WHEN 4 THEN 3
        WHEN 5 THEN 4
        WHEN 6 THEN 5
        WHEN 7 THEN 6
    END
    AS DayOfWeekUK,

    @DayOfWeekInMonth AS DayOfWeekInMonth,
    @DayOfWeekInYear AS DayOfWeekInYear,
    @DayOfQuarter AS DayOfQuarter,
    DATEPART(DY, @CurrentDate) AS DayOfYear,
    DATEPART(WW, @CurrentDate) + 1 - DATEPART(WW, CONVERT(VARCHAR,
    DATEPART(MM, @CurrentDate)) + '/1/' + CONVERT(VARCHAR,
    DATEPART(YY, @CurrentDate))) AS WeekOfMonth,
    (DATEDIFF(DD, DATEADD(QQ, DATEDIFF(QQ, 0, @CurrentDate), 0),
    @CurrentDate) / 7) + 1 AS WeekOfQuarter,
    DATEPART(WW, @CurrentDate) AS WeekOfYear,
    DATEPART(MM, @CurrentDate) AS Month,
    DATENAME(MM, @CurrentDate) AS MonthName,
    CASE
        WHEN DATEPART(MM, @CurrentDate) IN (1, 4, 7, 10) THEN 1
        WHEN DATEPART(MM, @CurrentDate) IN (2, 5, 8, 11) THEN 2
        WHEN DATEPART(MM, @CurrentDate) IN (3, 6, 9, 12) THEN 3
    END AS MonthOfQuarter,
    DATEPART(QQ, @CurrentDate) AS Quarter,
    CASE DATEPART(QQ, @CurrentDate)
        WHEN 1 THEN 'First'
        WHEN 2 THEN 'Second'
        WHEN 3 THEN 'Third'
        WHEN 4 THEN 'Fourth'
    END

```

```

        END AS QuarterName,
        DATEPART(YEAR, @CurrentDate) AS Year,
        'CY ' + CONVERT(VARCHAR, DATEPART(YEAR, @CurrentDate)) AS YearName,
        LEFT(DATENAME(MM, @CurrentDate), 3) + '-' + CONVERT(VARCHAR,
        DATEPART(YY, @CurrentDate)) AS MonthYear,
        RIGHT('0' + CONVERT(VARCHAR, DATEPART(MM, @CurrentDate)),2) +
        CONVERT(VARCHAR, DATEPART(YY, @CurrentDate)) AS MMYYYY,
        CONVERT(DATETIME, CONVERT(DATE, DATEADD(DD, -(DATEPART(DD,
        @CurrentDate) - 1), @CurrentDate))) AS FirstDayOfMonth,
        CONVERT(DATETIME, CONVERT(DATE, DATEADD(DD, -(DATEPART(DD,
        (DATEADD(MM, 1, @CurrentDate)))), DATEADD(MM, 1,
        @CurrentDate)))) AS LastDayOfMonth,
        DATEADD(QQ, DATEDIFF(QQ, 0, @CurrentDate), 0) AS FirstDayOfQuarter,
        DATEADD(QQ, DATEDIFF(QQ, -1, @CurrentDate), -1) AS LastDayOfQuarter,
        CONVERT(DATETIME, '01/01/' + CONVERT(VARCHAR, DATEPART(YY,
        @CurrentDate))) AS FirstDayOfYear,
        CONVERT(DATETIME, '12/31/' + CONVERT(VARCHAR, DATEPART(YY,
        @CurrentDate))) AS LastDayOfYear,
        NULL AS IsHolidaySL,
        CASE DATEPART(DW, @CurrentDate)
            WHEN 1 THEN 0
            WHEN 2 THEN 1
            WHEN 3 THEN 1
            WHEN 4 THEN 1
            WHEN 5 THEN 1
            WHEN 6 THEN 1
            WHEN 7 THEN 0
        END AS IsWeekday,
        NULL AS HolidaySL, (case when @CurrentDate = convert(date, sysdatetime()) then 1 else 0 end), 0, 0
    SET @CurrentDate = DATEADD(DD, 1, @CurrentDate)
END

```

SELECT * FROM [dbo].[DimDate]

FactAccidentTbl

This is my fact table and it is combined with DimDriver, DimDate, DimAccident_Location, DimControlled_Status, DimRoad. And also, there is more transactional data in here. After loading data to all the dimensions and the fact table:

The screenshot shows the Microsoft SQL Server Management Studio interface. The title bar indicates the connection is to 'SQLQuery10.sql - LAPTOP-5RFD4QAA_Accident_Warehouse (LAPTOP-5RFD4QAA\Prabodha (53)) - Microsoft SQL Server Management Studio'. The menu bar includes File, Edit, View, Query, Project, Tools, Window, Help. The toolbar has icons for New Query, Execute, Save, Undo, Redo, Copy, Paste, Find, Replace, and others.

The Object Explorer on the left shows the database structure under 'Accident_Warehouse': Programmability, Service Broker, Storage, Security, Tables (System Tables, External Tables), dim tables (DimAccidentLocation, DimCity, DimControlled_Status, DimDate, DimDim, DimDriver, DimRegion, DimRoad, FactAccidentTbl), Views, System Views, External Resources, External Data Sources, External File Formats, Synonyms, Programmability, Stored Procedures, System Stored Procedures, update stored procedures (UpdateDimAccidentLocation, UpdateDimCity, UpdateDimControlled_Status, UpdateDimRegion, UpdateDimRoad), Functions, Database Triggers, Assemblies, Tuner.

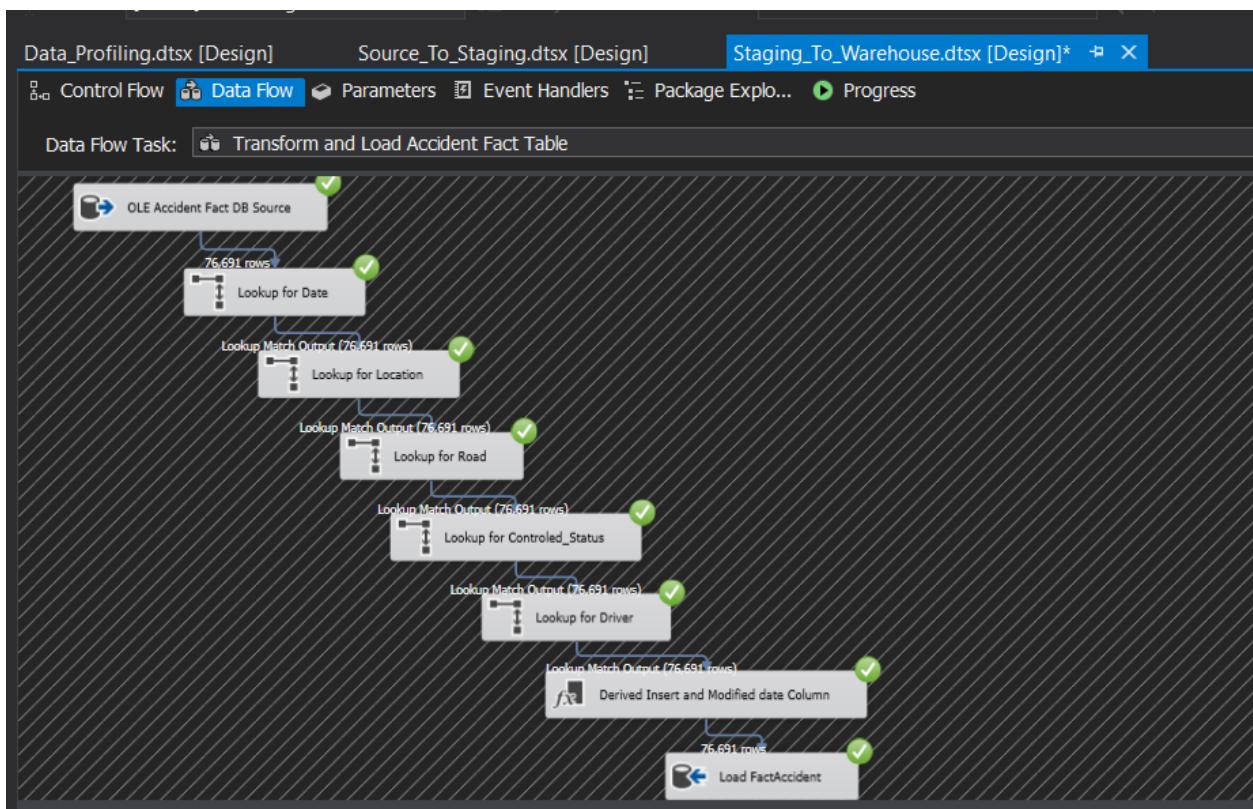
The main window contains four tabs: 'SQLQuery10.sql - ...QAA(Prabodha (53))' (highlighted), 'SQLQuery9.sql - ...QAA(Prabodha (65))', 'SQLQuery8.sql - ...QAA(Prabodha (67))', and 'SQLQuery7.sql - ...QAA(Prabodha (59))'. The current tab displays a T-SQL script:

```
***** Script for SelectTopNRows command from SSMS *****/
SELECT TOP 1000 [Accident_Index]
      ,[Police_Force]
      ,[Accident_Severity]
      ,[Number_of_Vehicles]
      ,[Number_of_Casualties]
      ,[RoadKey]
      ,[ConditionsKey]
      ,[Accident_DateKey]
      ,[Total_Vehicles_that_Accidented_Within_a_day]
      ,[Total_Death]
      ,[DriverKey]
      ,[LocationKey]
      ,[InsertedDate]
      ,[ModifiedDate]
  FROM [Adventure_Warehouse].[dbo].[FactAccidentTbl]
```

The 'Results' tab shows the execution results of the query:

Accident_Index	Police_Force	Accident_Severity	Number_of_Vehicles	Number_of_Casualties	RoadKey	ConditionsKey	Accident_DateKey	Total_Vehicles_that_Accidented_Within_a_day	Total_death	DriverKey	LocationKey	InsertedDate	
1	AC_L_0000001	1	3	2	1	3999	1708	20130108	72	52	74255	2021-05-12 23:56	
2	AC_L_0000002	1	3	2	1	4126	432	20130624	142	122	331	54479	2021-05-12 23:56
3	AC_L_0000003	1	3	2	1	1966	1490	20130201	90	70	284	69203	2021-05-12 23:56
4	AC_L_0000004	1	3	1	1	527	1219	20131024	128	108	459	25903	2021-05-12 23:56
5	AC_L_0000005	1	3	1	1	674	1976	20130205	38	62	839	13398	2021-05-12 23:56
6	AC_L_0000006	1	3	2	1	381	1769	20130410	82	18	249	72752	2021-05-12 23:56
7	AC_L_0000007	1	3	1	1	3327	2707	20120730	72	52	292	62583	2021-05-12 23:56
8	AC_L_0000008	1	3	2	1	1291	2060	20130507	95	75	603	20866	2021-05-12 23:56
9	AC_L_0000009	1	3	2	1	3264	659	20140310	34	14	654	16933	2021-05-12 23:56
10	AC_L_0000010	1	3	2	1	3095	532	20121028	51	31	40	20202	2021-05-12 23:56
11	AC_L_0000011	1	3	1	1	2204	705	20130115	99	79	886	6249	2021-05-12 23:56
12	AC_L_0000012	1	3	2	2	2435	502	20130505	123	103	620	51784	2021-05-12 23:56
13	AC_L_0000013	1	3	2	1	3492	2722	20131028	125	105	240	11006	2021-05-12 23:56
14	AC_L_0000014	1	3	1	1	2060	1303	20120721	119	99	9	65874	2021-05-12 23:56
15	AC_L_0000015	1	3	1	1	3882	1127	20130207	81	61	551	1792	2021-05-12 23:56
16	AC_L_0000016	1	3	1	1	2670	1748	20121027	71	51	806	66844	2021-05-12 23:56

The status bar at the bottom indicates 'Query executed successfully.' and the connection details 'LAPTOP-5RFD4QAA (13.0 SP1) | LAPTOP-5RFD4QAA\Prabod... | Adventure_Warehouse | 00:00:02 | 1,000 rows'.



In addition to that I have used to sorts, merge join, derived columns, unions for completing this task.

Accident_Staging DB

The screenshot shows two separate sessions in Microsoft SQL Server Management Studio (SSMS) against the 'Accident_Staging' database.

Session 1 (Top):

- Query:** `SELECT TOP 1000 [Region_ID], [Region_name] FROM [Accident_Staging].[dbo].[RegionStaging];`
- Results:** A table showing Region IDs and names. The data is as follows:

Region_ID	Region_name
1	East Midlands
2	East of England
3	London
4	North East
5	North West
6	South East
7	South West
8	West Midlands
9	Yorkshire and The Humber

Session 2 (Bottom):

- Query:** `SELECT TOP 1000 [City_ID], [City_name], [RegionID] FROM [Accident_Staging].[dbo].[CityStaging];`
- Results:** A table showing City IDs, names, and Region IDs. The data is as follows:

City_id	City_name	RegionID
1	London	8
2	West Midlands	3
3	Greater Manchester	2
4	West Yorkshire	7
5	Kent	2
6	Merseyside	6
7	Essex	4
8	South Yorkshire	8
9	Hampshire	9
10	Surrey	9
11	Tyne and Wear	2
12	Wales	6
13	Lancashire	4
14	Nottinghamshire	5
15	Cheshire	8
16	Staffordshire	1
17	Derbyshire	2

SQLQuery12.sql - LAPTOP-5RFD4QAA_Accident_Staging (LAPTOP-5RFD4QAA\Prabodha (65)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

New Query Execute

Object Explorer

Accident_Staging

```
***** Script for SelectTopNRows command from SSMS *****
SELECT TOP (1000) [Location_id]
      ,[LSOA_of_Accident_Location]
      ,[longitude]
      ,[latitude]
      ,[Urban_or_Rural_Area]
      ,[CityID]
   FROM [Accident_Staging].[dbo].[LocationStaging]
```

Results

Location_id	LSOA_of_Accident_Location	Longitude	Latitude	Urban_or_Rural_Area	CityID
1	E010281	-0.19101	51.42429	1	28
2	E0102807	-0.200838	51.47793	1	24
3	E0102808	-0.188036	51.467618	1	45
4	E0102806	-0.202059	51.514235	1	59
5	E0102800	-0.183773	51.467614	1	51
6	E0102912	-0.185496	51.463233	1	25
7	E0102818	-0.160419	51.501567	1	49
8	E0102905	-0.213862	51.523975	1	51
9	E0102818	-0.161567	51.468077	1	31
10	E0102825	-0.198587	51.505576	1	42
11	E0102808	-0.190082	51.502032	1	77
12	E0102807	-0.204686	51.497037	1	32
13	E0102804	-0.197303	51.500001	1	69
14	E0102804	-0.207274	51.514117	1	32
15	E0102829	-0.20087	51.516082	1	43
16	E0102840	-0.16232	51.461912	1	29
17	E0102872	-0.212048	51.511448	1	41
18	E0102840	-0.173448	51.461985	1	26
19	E0102813	-0.198947	51.466019	1	52
20	E0102827	-0.194918	51.507318	1	17
21	E0102884	-0.197777	51.511499	1	63
22	E0102848	-0.202049	51.462652	1	12
23	E0102902	-0.16055	51.491137	1	43
24	E0102895	-0.180418	51.46785	1	57
25	E0102844	-0.169814	51.468426	1	36
26	E0102889	-0.188775	51.502278	1	66
27	E0102889	-0.165916	51.501694	1	31

LAPTOP-5RFD4QAA (13.0 SP1) | LAPTOP-5RFD4QAA\Prabodha... | Accident_Staging | 00:00:00 | 1,000 rows

Ready

SQLQuery14.sql - LAPTOP-5RFD4QAA_Accident_Staging (LAPTOP-5RFD4QAA\Prabodha (70)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

New Query Execute

Object Explorer

Accident_Staging

```
***** Script for SelectTopNRows command from SSMS *****
SELECT TOP (1000) [Road_Id]
      ,[Road_Name]
      ,[Road_category]
      ,[Road_Type]
   FROM [Accident_Staging].[dbo].[RoadStaging]
```

Results

Road_Id	Road_Name	Road_category	Road_Type
1	M1	TM	Single carriageway
2	M621	TR	Single carriageway
3	M18	TM	One way street
4	M62	TM	Single carriageway
5	A614	TR	Single carriageway
6	M621	TM	Roundabout
7	A1	TM	One way street
8	A1	TR	Single carriageway
9	A1	PR	Single carriageway
10	A10	PR	Single carriageway
11	A18	PR	Dual carriageway
12	A46	PU	Single carriageway
13	A57	PR	Single carriageway
14	A58	PR	Single carriageway
15	A58	TU	Single carriageway
16	A58	PU	One way street
17	A59	PR	Single carriageway
18	A60	PU	Single carriageway
19	A61	PR	Dual carriageway
20	A61	PU	Single carriageway
21	A62	PU	Single carriageway
22	A63	TR	Single carriageway
23	A66	TR	Single carriageway
24	A65	RU	Single carriageway
25	A66	TM	Dual carriageway
26	A64	DU	Dual carriageway
27	A164	PU	Single carriageway
28	A165	PR	Single carriageway
29	A165	PU	Single carriageway

LAPTOP-5RFD4QAA (13.0 SP1) | LAPTOP-5RFD4QAA\Prabodha... | Accident_Staging | 00:00:00 | 1,000 rows

Ready

SQLQuery1.sql - LAPTOP-SRFD4QAA.Accident_Staging (LAPTOP-SRFD4QAA\Prabodha (52)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

Quick Launch (Ctrl+Q)

Object Explorer

Connect ▾ Accident_Staging Execute

```
SELECT TOP (1000) [Con_id]
 ,[Speed_Limit]
,[Road_Junction_Control]
,[Pedestrian_Crossing-Human_Control]
,[Pedestrian_Crossing-Physical_Facilities]
,[Light_Conditions]
,[Weather_Conditions]
,[Road_Surface_Conditions]
,[Special_Conditions_at_Site]
FROM [Accident_Staging].[dbo].[Controlled_StatusStaging]
```

Results Messages

Con_id	Speed_Limit	Road_Junction_Control	Pedestrian_Crossing-Human_Control	Pedestrian_Crossing-Physical_Facilities	Light_Conditions	Weather_Conditions	Road_Surface_Conditions	Special_Conditions_at_Site
1	20	Automatic traffic signal	None within 50 metres	Pedestrian phase at traffic signal junction	Darkness: Street lights present and lit	Fine without high winds	Dry	None
2	30	Giveaway or uncontrolled	None within 50 metres	No physical crossing within 50 metres	Darkness: Street lights present and lit	Fine without high winds	Dry	None
3	30	Giveaway or uncontrolled	None within 50 metres	non-junction pedestrian crossing	Daylight: Street light present	Fine without high winds	Dry	None
4	50	Giveaway or uncontrolled	None within 50 metres	No physical crossing within 50 metres	Daylight: Street light present	Fine without high winds	Dry	None
5	30	Giveaway or uncontrolled	None within 50 metres	No physical crossing within 50 metres	Darkness: Street lights present and lit	Fine without high winds	Dry	None
6	30	Automatic traffic signal	None within 50 metres	Pedestrian phase at traffic signal junction	Darkness: Street lights present and lit	Rain without high winds	Wet/Damp	None
7	30	Automatic traffic signal	None within 50 metres	Pedestrian phase at traffic signal junction	Daylight: Street light present	Fine without high winds	Dry	None
8	30	Giveaway or uncontrolled	None within 50 metres	Zebra crossing	Daylight: Street light present	Fine without high winds	Dry	None
9	30	Giveaway or uncontrolled	None within 50 metres	No physical crossing within 50 metres	Daylight: Street light present	Fine without high winds	Dry	None
10	30	Giveaway or uncontrolled	None within 50 metres	No physical crossing within 50 metres	Darkness: Street lights present and lit	Raining without high winds	Wet/Damp	None
11	30	Giveaway or uncontrolled	None within 50 metres	non-junction pedestrian crossing	Darkness: Street lights present and lit	Fine without high winds	Dry	None
12	30	Automatic traffic signal	None within 50 metres	Pedestrian phase at traffic signal junction	Darkness: Street lights present and lit	Fine without high winds	Wet/Damp	None
13	30	Automatic traffic signal	None within 50 metres	Pedestrian phase at traffic signal junction	Daylight: Street light present	Fine without high winds	Dry	None
14	30	Automatic traffic signal	None within 50 metres	Pedestrian phase at traffic signal junction	Darkness: Street lights present and lit	Other	Wet/Damp	None
15	30	Automatic traffic signal	None within 50 metres	Pedestrian phase at traffic signal junction	Darkness: Street lights present and lit	Fine without high winds	Dry	None
16	30	Giveaway or uncontrolled	None within 50 metres	Zebra crossing	Daylight: Street light present	Fine without high winds	Dry	None
17	30	Giveaway or uncontrolled	None within 50 metres	No physical crossing within 50 metres	Darkness: Street lights present and lit	Raining without high winds	Wet/Damp	None

Query executed successfully.

LAPTOP-SRFD4QAA (13.0 SP1) | LAPTOP-SRFD4QAA\Prabodha... | Accident_Staging | 00:00:00 | 1,000 rows

Ready

SQLQuery11.sql - LAPTOP-SRFD4QAA.Accident_Staging (LAPTOP-SRFD4QAA\Prabodha (62)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

Quick Launch (Ctrl+Q)

Object Explorer

Connect ▾ Accident_Staging Execute

```
SELECT TOP (1000) [driver_id]
,[first_name]
,[last_name]
,[driver_address]
,[email]
,[phone]
,[gender]
,[age]
FROM [Accident_Staging].[dbo].[DriverStaging]
```

Results Messages

driver_id	first_name	last_name	driver_address	email	phone	gender	age
1	Shelby	Borne	7195 Fulton Park	sborne@businessews.com	747-430-7553	F	66
2	Gwendolyn	Zenichelli	080 Sherman Alley	gzenechelli@fb.com	406-209-7222	NULL	63
3	Chevalier	Laverne	151 Bergth Street	claverne@fb.com	406-209-7223	F	66
4	Levavco	Levavco	777 Tony Hill	levavco@fb.com	751-831-5881	M	51
5	Lee	Ardoch	61693 Johnson Court	leedoach4@fb.com	421-929-9782	F	38
6	Tabor	Sherrier	NULL	tsherrier@fb.com	782-754-5814	M	65
7	Eesy	Castello	8 Westbrook Court	ecastello@fb.com	504-494-5473	F	63
8	Mick	Deenly	56 Eliot Crossing	mdeenly7@cdc.gov	146-128-0307	M	38
9	Steffi	Pelochi	28812 Randy Park	spelochi@angelfire.com	805-770-5067	M	44
10	Wendell	Mulby	777 Basil Terrace	wmulby9@pr.org	883-403-4425	M	25
11	Morgen	Tropman	781 Bellfus Road	mtropmans@dell.com	189-275-0277	NULL	41
12	Carolus	Haworth	2438 Dixon Way	chaworth@rediff.com	434-076-1923	F	22
13	Basilio	Carville	1 Express Junction	bcarville@australia.org.au	610-774-9977	F	72
14	Bridie	Cubbin	05 Pleasure Parkway	bcubbin@mtv.com	198-193-4440	M	21
15	Etie	Malcolmi	32 Tony Alley	emalcolmi@t@google.co.uk	839-815-4492	F	65
16	Charmaine	Peltz	07 Kinnon Place	cpelzt@yellowpages.com	252-222-1111	M	82
17	Rosalind	Colla	9 Pawtucket Point	rcolla@businessweek.com	220-125-4145	M	81
18	Jeffy	Tolle	00 Lorraine Street	jtolle@optonline.net	117-753-1309	F	48
19	Doris	Okanade	80 Fallows Road	dokanade@optonline.net	137-778-1685	F	18
20	Cloudelle	Ridzell	48 Glendale Crossing	cridzell@optonline.com.br	207-859-4825	M	44
21	Scarfone	Venant	0261 Florence Cross	svenant@fbnews.com	425-263-6711	F	42
22	Ophelia	Martz	48 Oriole Trail	omartz@fb.com	758-903-3214	F	39
23	Rachele	Leabum	0000 Boyd Terrace	rleabum@buzzfeed.com	584-303-5225	F	57
24	Annetta	Stripp	821 Chinook Pass	astripp@libum.net	880-617-9983	F	61

Query executed successfully.

LAPTOP-SRFD4QAA (13.0 SP1) | LAPTOP-SRFD4QAA\Prabodha... | Accident_Staging | 00:00:00 | 1,000 rows

Ready

SQLQuery1.sql - LAPTOP-SRFD4QAA.Accident_Staging (LAPTOP-SRFD4QAA\Prabodha (55)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

Object Explorer

Connect ▾ Accident_Staging Execute

```
/*
***** Script for SelectTopNRows command from SSMS *****/
--SELECT TOP (1000) [Accident_Index]
    ,[Police_Force]
    ,[Accident_Severity]
    ,[Number_of_Vehicles]
    ,[Number_of_Casualties]
    ,[Road_ID]
    ,[Conditions_ID]
    ,[Accident_Date]
    ,[Total_Vehicles_that_Accidented_Within_a_day]
    ,[Total_death]
    ,[Driver_id]
    ,[Location_ID]
    FROM [Accident_Staging].[dbo].[AccidentStaging]
```

Results Messages

Accident_Index	Police_Force	Accident_Severity	Number_of_Vehicles	Number_of_Casualties	Road_ID	Conditions_ID	Accident_Date	Total_Vehicles_That_Accidented_Within_a_Day	Total_Death	Driver_Id	Location_ID
AC_L_000001	3	2	1	3099	1708	2013-01-08 00:00:00.000	72	52	110	74255	
AC_L_000002	1	3	2	4126	432	2013-06-24 00:00:00.000	142	122	331	54479	
AC_L_000003	1	3	2	1366	1490	2013-02-01 00:00:00.000	90	70	284	69203	
AC_L_000004	3	3	1	577	1219	2013-10-24 00:00:00.000	128	108	456	26583	
AC_L_000005	1	3	1	674	1706	2013-03-06 00:00:00.000	38	18	249	72752	
AC_L_000006	1	3	2	3381	1780	2013-04-10 00:00:00.000	82	63	839	13398	
AC_L_000007	1	3	1	2327	2707	2012-07-30 00:00:00.000	72	52	292	62882	
AC_L_000008	1	3	2	1291	2060	2013-05-07 00:00:00.000	95	75	603	20866	
AC_L_000009	1	3	2	3264	659	2014-03-10 00:00:00.000	34	14	654	16933	
AC_L_000010	1	3	2	3090	532	2012-10-28 00:00:00.000	51	31	40	51202	
AC_L_000011	1	3	1	2204	703	2013-01-19 00:00:00.000	99	79	868	62439	
AC_L_000012	1	3	2	2435	502	2012-07-05 00:00:00.000	123	103	820	51784	
AC_L_000013	1	3	2	3492	2722	2013-10-28 00:00:00.000	125	105	240	11006	
AC_L_000014	1	3	1	2060	1303	2012-07-21 00:00:00.000	119	99	9	65874	
AC_L_000015	1	3	1	3882	1127	2013-02-07 00:00:00.000	81	61	551	1792	
AC_L_000016	1	3	1	2670	1748	2012-10-27 00:00:00.000	71	51	806	66844	
AC_L_000017	1	3	2	3350	548	2013-11-15 00:00:00.000	102	82	251	46960	

Query executed successfully.

LN 1 Col 1 Ch 1 INS

Quick Launch (Ctrl+Q)

SQLQuery2.sql - LAPTOP-SRFD4QAA.Accident_Source (LAPTOP-SRFD4QAA\Prabodha (63)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

Object Explorer

Connect ▾ Accident_Source Execute

```
/*
***** Script for SelectTopNRows command from SSMS *****/
--SELECT TOP (1000) [Accident_Index]
    ,[Police_Force]
    ,[Accident_Severity]
    ,[Number_of_Vehicles]
    ,[Number_of_Casualties]
    ,[Road_ID]
    ,[Conditions_ID]
    ,[Accident_Date]
    ,[Total_Vehicles_That_Accidented_Within_a_Day]
    ,[Total_Death]
    ,[Driver_id]
    ,[Location_ID]
    FROM [Accident_Source].[dbo].[accident]
```

Results Messages

Accident_Index	Police_Force	Accident_Severity	Number_of_Vehicles	Number_of_Casualties	Road_ID	Conditions_ID	Accident_Date	Total_Vehicles_That_Accidented_Within_a_Day	Total_Death	Driver_id	Location_ID
AC_L_000001	3	2	1	3099	1708	2013-01-08 00:00:00.000	72	52	110	74255	
AC_L_000002	1	3	2	4126	432	2013-06-24 00:00:00.000	142	122	331	54479	
AC_L_000003	1	3	2	1366	1490	2013-02-01 00:00:00.000	90	70	284	69203	
AC_L_000004	3	3	1	577	1219	2013-10-28 00:00:00.000	128	108	456	26583	
AC_L_000005	1	3	1	674	1976	2013-05-07 00:00:00.000	38	18	249	72752	
AC_L_000006	1	3	2	3381	1789	2013-04-10 00:00:00.000	82	63	839	13398	
AC_L_000007	1	3	1	3327	2707	2012-07-30 00:00:00.000	72	52	292	62882	
AC_L_000008	1	3	2	1291	2060	2013-05-07 00:00:00.000	95	75	603	20866	
AC_L_000009	1	3	2	3264	659	2014-03-10 00:00:00.000	34	14	654	16933	
AC_L_000010	1	3	2	3090	532	2012-10-28 00:00:00.000	51	31	40	51202	
AC_L_000011	1	3	1	2204	703	2013-01-19 00:00:00.000	99	79	868	62439	
AC_L_000012	1	3	2	2435	502	2012-07-05 00:00:00.000	123	103	820	51784	
AC_L_000013	1	3	2	3492	2722	2013-10-28 00:00:00.000	125	105	240	11006	
AC_L_000014	1	3	1	2060	1303	2012-07-21 00:00:00.000	119	99	9	65874	
AC_L_000015	1	3	1	3882	1127	2013-02-07 00:00:00.000	81	61	551	1792	
AC_L_000016	1	3	1	2670	1748	2012-10-27 00:00:00.000	71	51	806	66844	
AC_L_000017	1	3	2	3350	548	2013-11-15 00:00:00.000	102	82	251	46960	

Query executed successfully.

LN 1 Col 1 Ch 1 INS

Quick Launch (Ctrl+Q)

Accident_Warehouse DB

SQLQuery22.sql - LAPTOP-5RFD4QAA\Adventure_Warehouse (LAPTOP-5RFD4QAA)\Prabodha (76) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

Quick Launch (Ctrl+Q)

Object Explorer

Connect

Adventure_Warehouse

SQLQuery22.sql - ...QAA\Prabodha (76) SQLQuery21.sql - ...QAA\Prabodha (83) SQLQuery20.sql - ...QAA\Prabodha (81) SQLQuery19.sql - ...QAA\Prabodha (79)

```
***** Script for SelectTopNRows command from SSMS *****/
SELECT TOP (1000) [regionSK]
      ,[alternateRegionID]
      ,[Region_name]
      ,[InsertedDate]
      ,[ModifiedDate]
  FROM [Adventure_Warehouse].[dbo].[DimRegion]
```

Results Messages

regionSK	alternateRegionID	Region_name	insertedDate	modifiedDate
1	1	East Midlands	2021-05-12 22:53:22.363	2021-05-12 22:53:22.363
2	2	East of England	2021-05-12 22:53:22.367	2021-05-12 22:53:22.367
3	3	London	2021-05-12 22:53:22.367	2021-05-12 22:53:22.367
4	4	North East	2021-05-12 22:53:22.367	2021-05-12 22:53:22.370
5	5	North West	2021-05-12 22:53:22.370	2021-05-12 22:53:22.370
6	6	South East	2021-05-12 22:53:22.370	2021-05-12 22:53:22.370
7	7	South West	2021-05-12 22:53:22.370	2021-05-12 22:53:22.370
8	8	West Midlands	2021-05-12 22:53:22.370	2021-05-12 22:53:22.370
9	9	Yorkshire and The Humber	2021-05-12 22:53:22.370	2021-05-12 22:53:22.373

Query executed successfully.

LAPTOP-5RFD4QAA (13.0 SP1) LAPTOP-5RFD4QAA\Prabod... Adventure_Warehouse 00:00:00 | 9 rows

Ready

The screenshot shows the Microsoft SQL Server Management Studio interface. The title bar indicates the connection is to 'SQLQuery2.sql - LAPTOP-5RFD4QA\Accident_Warehouse (LAPTOP-5RFD4QA\Praboda (33)) - Microsoft SQL Server Management Studio'. The 'Object Explorer' pane on the left shows the database structure for 'Accident_Warehouse'. The 'SQL Query1.sql - L_QAA\Praboda (\$2)' tab is active, displaying a T-SQL script to select top 1000 rows from the 'DimCity' table. The 'Results' tab shows the execution output, which includes 84 rows of city information. The status bar at the bottom right shows the session details: 'LAPTOP-5RFD4QA (13.0 SP1)', 'LAPTOP-5RFD4QA\Praboda...', 'Accident_Warehouse', '00:00:00', and '84 rows'.

citySK	alternateCityId	cityName	regionKey	insertedDate	modifiedDate
1	1	Bathshire	1	2021-05-12 22:53:22.763	2021-05-13 22:31:42.103
2	33	North Yorkshire	1	2021-05-12 22:53:22.763	2021-05-13 22:31:42.103
3	46	Dorset	1	2021-05-12 22:53:22.767	2021-05-13 22:31:42.103
4	40	Leicester	1	2021-05-12 22:53:22.767	2021-05-13 22:31:42.103
5	54	Luton	1	2021-05-12 22:53:22.787	2021-05-13 22:31:42.103
6	59	South Gloucestershire	1	2021-05-12 22:53:22.790	2021-05-13 22:31:42.103
7	70	Torbay	1	2021-05-12 22:53:22.790	2021-05-13 22:31:42.103
8	59	Milton Keynes	1	2021-05-12 22:53:22.790	2021-05-13 22:31:42.103
9	64	Reading	1	2021-05-12 22:53:22.790	2021-05-13 22:31:42.103
10	72	Windsor and Maidenhead	1	2021-05-12 22:53:22.790	2021-05-13 22:31:42.103
11	43	Plymouth	1	2021-05-12 22:53:22.790	2021-05-13 22:31:42.103
12	17	Derbyshire	2	2021-05-15 12:53:22.790	2021-05-13 22:31:42.103
13	77	Ile de Wight	2	2021-05-12 22:53:22.790	2021-05-13 22:31:42.103
14	74	Sussex	2	2021-05-12 22:53:22.790	2021-05-13 22:31:42.103
15	38	Wiltshire	2	2021-05-12 22:53:22.790	2021-05-13 22:31:42.103
16	84	Rutland	2	2021-05-12 22:53:22.790	2021-05-13 22:31:42.103
17	69	Blackburn with Darwen	2	2021-05-12 22:53:22.793	2021-05-13 22:31:42.103

SQLQuery5.sql - LAPTOP-SRFD4QAA.Accident_Warehouse (LAPTOP-SRFD4QAA\Prabodha (51)) - Microsoft SQL Server Management Studio

File Edit View Project Tools Window Help

Quick Launch (Ctrl+Q)

Object Explorer

Connect ▾ Execute

Adventure_Warehouse

File Tables External Tables Views Synonyms Programmability Service Broker Storage Security ReportServer ReportServerTempDB Security Server Objects Replication PolyBase Always On High Availability Management

Accident_Source Accident_Staging Accident_Warehouse Database Diagrams Tables System Tables FileTables External Tables Views Synonyms Programmability Service Broker Storage Security ReportServer ReportServerTempDB Security Server Objects Replication PolyBase Always On High Availability Management

Accident_AccidentLocation DimCity DimControlled_Status DimDate DimDriver DimRegion DimRoad FactAccidentTbl

Script for SelectTopNRows command from SSMS *****

```
-SELECT TOP (1000) [locationSK]
      ,[alternateLocation_id]
      ,[LSOA_of_Accident_Location]
      ,[longitude]
      ,[latitude]
      ,[Urban_or_Rural_Area]
      ,[CityKey]
      ,[insertedDate]
      ,[modifiedDate]
  FROM [Adventure_Warehouse].[dbo].[DimAccidentLocation]
```

Results Messages

locationSK	alternateLocation_id	LSOA_of_Accident_Location	Longitude	Latitude	Urban_or_Rural_Area	CityKey	insertedDate	modifiedDate
1	1	E01002821	-0.169101	51.493429	1	59	2021-05-12 22:53:23.063	2021-05-13 22:31:42.337
2	2	E01004760	-0.200838	51.517931	1	59	2021-05-12 22:53:23.067	2021-05-13 22:31:42.430
3	3	E01002898	-0.188536	51.497618	1	24	2021-05-12 22:53:23.067	2021-05-13 22:31:42.463
4	4	E01002868	-0.190088	51.514326	1	8	2021-05-12 22:53:23.067	2021-05-13 22:31:42.466
5	5	E01002890	-0.183773	51.491414	1	60	2021-05-12 22:53:23.067	2021-05-13 22:31:42.510
6	6	E01002912	-0.195496	51.503253	1	21	2021-05-12 22:53:23.073	2021-05-13 22:31:42.540
7	7	E01002818	-0.160419	51.501567	1	25	2021-05-12 22:53:23.073	2021-05-13 22:31:42.557
8	8	E01002905	-0.213962	51.523975	1	60	2021-05-12 22:53:23.073	2021-05-13 22:31:42.587
9	9	E01002819	-0.181987	51.498077	1	64	2021-05-12 22:53:23.073	2021-05-13 22:31:42.603
10	10	E01002825	-0.196587	51.505676	1	64	2021-05-12 22:53:23.073	2021-05-13 22:31:42.620
11	11	E01002889	-0.190082	51.502028	1	13	2021-05-12 22:53:23.073	2021-05-13 22:31:42.650
12	12	E01002867	-0.204686	51.497027	1	54	2021-05-12 22:53:23.073	2021-05-13 22:31:42.667
13	13	E01002884	-0.197303	51.509884	1	17	2021-05-12 22:53:23.073	2021-05-13 22:31:42.697
14	14	E01002874	-0.207778	51.514117	1	54	2021-05-12 22:53:23.073	2021-05-13 22:31:42.713
15	15	E01002879	-0.20927	51.516002	1	11	2021-05-12 22:53:23.073	2021-05-13 22:31:42.743
16	16	E01002840	-0.18022	51.491912	1	38	2021-05-12 22:53:23.073	2021-05-13 22:31:42.760
17	17	E01002872	-0.212046	51.511448	1	78	2021-05-12 22:53:23.073	2021-05-13 22:31:42.773

Query executed successfully.

LN 1 Col 1 Ch 1 INS

Quick Launch (Ctrl+Q)

SQLQuery23.sql - LAPTOP-SRFD4QAA.Accident_Warehouse (LAPTOP-SRFD4QAA\Prabodha (75)) - Microsoft SQL Server Management Studio

File Edit View Project Tools Window Help

Quick Launch (Ctrl+Q)

Object Explorer

Connect ▾ Execute

Adventure_Warehouse

File Tables External Tables Views Synonyms Programmability Service Broker Storage Security ReportServer ReportServerTempDB Security Server Objects Replication PolyBase Always On High Availability Management

Accident_Source Accident_Staging Accident_Warehouse Database Diagrams Tables System Tables FileTables External Tables Views Synonyms Programmability Service Broker Storage Security ReportServer ReportServerTempDB Security Server Objects Replication PolyBase Always On High Availability Management

Accident_AccidentLocation DimCity DimControlled_Status DimDate DimDriver DimRegion DimRoad FactAccidentTbl

Script for SelectTopNRows command from SSMS *****

```
-SELECT TOP (1000) [roadSK]
      ,[alternateRoad_Id]
      ,[Road_Name]
      ,[Road_category]
      ,[Road_Type]
      ,[insertedDate]
      ,[modifiedDate]
  FROM [Adventure_Warehouse].[dbo].[DimRoad]
```

Results Messages

roadSK	alternateRoad_Id	Road_Name	Road_category	Road_Type	insertedDate	modifiedDate
1	1	M1	TM	Single carriageway	2021-05-12 23:14:53.303	2021-05-12 23:14:53.307
2	2	M621	TM	Single carriageway	2021-05-12 23:14:53.307	2021-05-12 23:14:53.307
3	3	M18	TM	One way street	2021-05-12 23:14:53.310	2021-05-12 23:14:53.310
4	4	M62	TM	Single carriageway	2021-05-12 23:14:53.310	2021-05-12 23:14:53.310
5	5	A614	TR	Single carriageway	2021-05-12 23:14:53.310	2021-05-12 23:14:53.310
6	6	M621	TM	Roundabout	2021-05-12 23:14:53.310	2021-05-12 23:14:53.310
7	7	A1	TM	One way street	2021-05-12 23:14:53.310	2021-05-12 23:14:53.310
8	8	A1	TM	Single carriageway	2021-05-12 23:14:53.310	2021-05-12 23:14:53.310
9	9	A1	TR	Single carriageway	2021-05-12 23:14:53.310	2021-05-12 23:14:53.310
10	10	A18	PR	Single carriageway	2021-05-12 23:14:53.310	2021-05-12 23:14:53.310
11	11	A18	PR	Dual carriageway	2021-05-12 23:14:53.310	2021-05-12 23:14:53.310
12	12	A46	PU	Single carriageway	2021-05-12 23:14:53.310	2021-05-12 23:14:53.310
13	13	A57	PR	Single carriageway	2021-05-12 23:14:53.310	2021-05-12 23:14:53.313
14	14	A58	PR	Single carriageway	2021-05-12 23:14:53.313	2021-05-12 23:14:53.313
15	15	A58	TU	Single carriageway	2021-05-12 23:14:53.313	2021-05-12 23:14:53.313
16	16	A58	PU	One way street	2021-05-12 23:14:53.313	2021-05-12 23:14:53.313
17	17	A59	PR	Single carriageway	2021-05-12 23:14:53.313	2021-05-12 23:14:53.313
18	18	A60	PU	Single carriageway	2021-05-12 23:14:53.313	2021-05-12 23:14:53.313
19	19	A61	PR	Dual carriageway	2021-05-12 23:14:53.313	2021-05-12 23:14:53.313
20	20	A61	PU	Single carriageway	2021-05-12 23:14:53.317	2021-05-12 23:14:53.317
21	21	A62	PU	Single carriageway	2021-05-12 23:14:53.317	2021-05-12 23:14:53.317
22	22	A63	TU	Single carriageway	2021-05-12 23:14:53.317	2021-05-12 23:14:53.317
23	23	A65	TR	Single carriageway	2021-05-12 23:14:53.317	2021-05-12 23:14:53.317
24	24	A65	PU	Single carriageway	2021-05-12 23:14:53.317	2021-05-12 23:14:53.317
25	25	A66	TM	Dual carriageway	2021-05-12 23:14:53.317	2021-05-12 23:14:53.317
26	26	A614	PR	Dual carriageway	2021-05-12 23:14:53.317	2021-05-12 23:14:53.317
27	27	A164	PU	Single carriageway	2021-05-12 23:14:53.317	2021-05-12 23:14:53.317

Query executed successfully.

LN 1 Col 1 Ch 1 INS

Quick Launch (Ctrl+Q)

SQLQuery3.sql - LAPTOP-SRFD4QA\Accident_Warehouse (LAPTOP-SRFD4QA\Prabodha (56)) - Microsoft SQL Server Management Studio

File Edit View Project Tools Window Help

Quick Launch (Ctrl+Q)

Object Explorer

Connect ▾ Execute

SQLQuery3.sql - L...OAA\Prabodha (56) X SQLQuery2.sql - L...OAA\Prabodha (53) SQLQuery1.sql - L...OAA\Prabodha (52)

```
***** Script for SelectTopNRows command from SSMS *****
--SELECT TOP (1000) [con_statusSK]
,[alternateCon_id]
,[Speed_limit]
,[Road_Junction_Control]
,[Pedestrian_Crossing_Human_Control]
,[Pedestrian_Crossing_Physical_Facilities]
,[Light_Conditions]
,[Weather_Conditions]
,[Road_Surface_Conditions]
,[Special_Conditions_at_Site]
,[InsertedDate]
,[modifiedDate]
FROM [Adventure_Warehouse].[dbo].[DimControlled_Status]
```

Results Messages

con_statusSK	alternateCon_id	Speed_limit	Road_Junction_Control	Pedestrian_Crossing_Human_Control	Pedestrian_Crossing_Physical_Facilities	Light_Conditions	Weather_Conditions	Road_Surface_Conditions	Special_Conditions_at_Site
1	1	30	Automatic traffic signal	Darkness: Street lights present and lit	Fine without high winds	Dry	None	None within 50 metres	Pedestrian phase at traffic signal
2	2	30	Giveray or uncontrolled	Darkness: Street lights present and lit	Fine without high winds	Dry	None	None within 50 metres	No physical crossing within 50 m
3	3	30	Giveray or uncontrolled	Daylight: Street light present	Fine without high winds	Dry	None	None within 50 metres	non-junction pedestrian crossing
4	4	30	Giveray or uncontrolled	Daylight: Street light present	Fine without high winds	Dry	None	None within 50 metres	No physical crossing within 50 m
5	5	30	Giveray or uncontrolled	Daylight: Street light present	Fine without high winds	Dry	None	None within 50 metres	No physical crossing within 50 m
6	6	30	Giveray or uncontrolled	Daylight: Street lights present and lit	Fine without high winds	Dry	None	None within 50 metres	No physical crossing within 50 m
7	7	30	Automatic traffic signal	Daylight: Street light present	Fine without high winds	Wet/Damp	None	None within 50 metres	Pedestrian phase at traffic signal
8	8	30	Giveray or uncontrolled	Daylight: Street light present	Fine without high winds	Dry	None	None within 50 metres	Zebra crossing
9	9	30	Giveray or uncontrolled	Daylight: Street light present	Fine without high winds	Dry	None	None within 50 metres	No physical crossing within 50 m
10	10	30	Giveray or uncontrolled	Darkness: Street lights present and lit	Raining without high winds	Wet/Damp	None	None within 50 metres	No physical crossing within 50 m
11	11	30	Giveray or uncontrolled	Darkness: Street lights present and lit	Fine without high winds	Dry	None	None within 50 metres	non-junction pedestrian crossing
12	12	30	Automatic traffic signal	Darkness: Street lights present and lit	Fine without high winds	Wet/Damp	None	None within 50 metres	Pedestrian phase at traffic signal
13	13	30	Automatic traffic signal	Daylight: Street light present	Fine without high winds	Dry	None	None within 50 metres	Pedestrian phase at traffic signal
14	14	30	Automatic traffic signal	Daylight: Street lights present and lit	Other	Wet/Damp	None	None within 50 metres	Pedestrian phase at traffic signal
15	15	30	Automatic traffic signal	Darkness: Street lights present and lit	Fine without high winds	Dry	None	None within 50 metres	Pedestrian phase at traffic signal
16	16	30	Giveray or uncontrolled	Daylight: Street light present	Fine without high winds	Dry	None	None within 50 metres	Zebra crossing

Query executed successfully.

LAPTOP-SRFD4QA (13.0 SP1) LAPTOP-SRFD4QA\Prabod... Accident_Warehouse | 00:00:00 | 1,000 rows

Ready

SQLQuery21.sql - LAPTOP-SRFD4QA\Accident_Warehouse (LAPTOP-SRFD4QA\Prabodha (83)) - Microsoft SQL Server Management Studio

File Edit View Project Tools Window Help

Quick Launch (Ctrl+Q)

Object Explorer

Connect ▾ Execute

SQLQuery21.sql - OAA\Prabodha (83) X SQLQuery20.sql - OAA\Prabodha (81) SQLQuery19.sql - OAA\Prabodha (79) SQLQuery18.sql - OAA\Prabodha (78)

```
***** Script for SelectTopNRows command from SSMS *****
--SELECT TOP (1000) [driverSK]
,[alternatedriver_id]
,[first_name]
,[last_name]
,[driver_address]
,[email]
,[phone]
,[gender]
,[age]
,[startDate]
,[endDate]
,[InsertedDate]
,[modifiedDate]
FROM [Adventure_Warehouse].[dbo].[DimDriver]
```

Results Messages

driverSK	alternatedriver_id	first_name	last_name	driver_address	email	phone	gender	age	startDate	endDate	InsertedDate	modifiedDate
1	1	Shebi	Bonnie	7195 Fulton Park	sbonnie@businesswire.com	747-430-7553	F	66	2021-05-12 03:17:00.000	NULL	NULL	NULL
2	2	Gwendolen	Zanichelli	080 Sherman Alley	gzanichelli@ltl.com	800-688-7222	N	83	2021-05-12 03:17:00.000	NULL	NULL	NULL
3	3	Chevalier	Laugheman	15 Lindbergh Avenue	c.laugheman2@vk.com	496-296-1207	F	66	2021-05-12 03:17:00.000	NULL	NULL	NULL
4	4	Leopoldine	Lowthian	9877 Tony Hill	lowthian3@biggar.com	751-831-8581	F	51	2021-05-12 03:17:00.000	NULL	NULL	NULL
5	5	Lea	Adcock	61693 Johnson Court	lae@adcock.com	703-222-1900	M	36	2021-05-12 03:17:00.000	NULL	NULL	NULL
6	6	Tabor	Schaeffer	1225 1st Street	t.schaeffer@tabor.com	762-754-9614	M	35	2021-05-12 03:17:00.000	2021-05-12 16:28:33.000	NULL	NULL
7	7	Eesy	Costello	8 Westport Court	ecostello@independent.co.uk	504-494-5473	F	63	2021-05-12 03:17:00.000	NULL	NULL	NULL
8	8	Muk	Deanly	56 East Crossing	mdeanly@feds.gov	146-128-0307	M	38	2021-05-12 03:17:00.000	NULL	NULL	NULL
9	9	Steffi	Pecival	28012 Raeds Park	spelchard@angelfire.com	205-770-5067	M	44	2021-05-12 03:17:00.000	NULL	NULL	NULL
10	10	prabod	Mulroney	777 Basil Terrace	london	111111111	M	25	2021-05-12 03:17:00.000	2021-05-12 18:28:33.000	NULL	NULL
11	11	Morgen	Troopman	781 Bellfamy Road	m.troopman@f dell.com	189-275-0277	N	41	2021-05-12 03:17:00.000	NULL	NULL	NULL
12	12	Carusel	Haworth	2438 Dixon Way	chaworth@rediff.com	434-976-1923	F	22	2021-05-12 03:17:00.000	NULL	NULL	NULL
13	13	Basilio	Carville	1 Express Junction	bcarville@audia.org.au	610-774-9977	F	72	2021-05-12 03:17:00.000	NULL	NULL	NULL
14	14	Bridie	Cubbins	05 Pleasure Parkway	b.cubbins@mtv.com	198-193-4405	M	21	2021-05-12 03:17:00.000	NULL	NULL	NULL
15	15	Elvie	Maffettini	32 Tony Alley	emaffettini@google.co.uk	639-815-4492	F	65	2021-05-12 03:17:00.000	NULL	NULL	NULL
16	16	Charmain	Petty	077 Kim Point	c.petty@yellowpages.com	235-248-3440	F	82	2021-05-12 03:17:00.000	NULL	NULL	NULL
17	17	Rosalinda	Crolla	4 Packers Trail	r.crolla@businesswire.com	220-128-4148	M	81	2021-05-12 03:17:00.000	NULL	NULL	NULL

Query executed successfully.

LAPTOP-SRFD4QA (13.0 SP1) LAPTOP-SRFD4QA\Prabod... Accident_Warehouse | 00:00:00 | 1,000 rows

Ready

SQLQuery4.sql - LAPTOP-SRFD4QA\Accident_Warehouse (LAPTOP-SRFD4QA\Prabodha (57)) - Microsoft SQL Server Management Studio

File Edit View Project Tools Window Help

New Query Execute

Object Explorer

SQLQuery4.sql - L..._QAA\Prabodha (57) SQLQuery3.sql - L..._QAA\Prabodha (56) SQLQuery2.sql - L..._QAA\Prabodha (53) SQLQuery1.sql - L..._QAA\Prabodha (52)

Connect > Accident_Warehouse > Execute

```
***** Script for SelectTopNRows command from SSMS *****
--SELECT TOP (1000) [DateSK]
,[Date]
,[JulianWeekUK]
,[DayofYearUSA]
,[DayofMonth]
,[DayofYear]
,[DayName]
,[DayofWeekUSA]
,[DayofWeekUK]
,[DayofWeekInMonth]
,[DayofWeekInYear]
,[DayofYear]
,[Year]
,[WeekofMonth]
,[WeekofQuarter]
,[WeekofYear]
,[Month]
,[MonthName]
,[MonthofQuarter]
,[Quarter]
```

Results Messages

DateSK	Date	FullDateUK	FullDateUSA	DayOfMonth	DaySuffix	DayName	DayOfWeekUSA	DayOfWeekUK	DayOfWeekInMonth	DayOfWeekInYear	DayOfQuarter	DayOfYear	WeekOfMonth	WeekOfQuarter	Week
1	20120012	2012-01-12 00:00:00.000	12/01/2012	12	12th	Thursday	5	4	1	1	1	12	2	2	2
2	20120113	2012-01-13 00:00:00.000	13/01/2012	13	13th	Friday	6	5	1	1	1	13	2	2	2
3	20120114	2012-01-14 00:00:00.000	14/01/2012	14	14th	Saturday	7	6	1	1	1	14	2	2	2
4	20120115	2012-01-15 00:00:00.000	15/01/2012	15	15th	Sunday	1	7	1	1	1	15	3	3	3
5	20120116	2012-01-16 00:00:00.000	16/01/2012	16	16th	Monday	2	1	1	1	1	16	3	3	3
6	20120117	2012-01-17 00:00:00.000	17/01/2012	17	17th	Tuesday	3	2	1	1	1	17	3	3	3
7	20120118	2012-01-18 00:00:00.000	18/01/2012	18	18th	Wednesday	4	3	1	1	1	18	3	3	3
8	20120119	2012-01-19 00:00:00.000	19/01/2012	19	19th	Thursday	5	4	2	2	2	19	3	3	3
9	20120120	2012-01-20 00:00:00.000	20/01/2012	20	20th	Friday	6	5	2	2	2	20	3	3	3
10	20120121	2012-01-21 00:00:00.000	21/01/2012	21	21st	Saturday	7	6	2	2	2	21	3	3	3
11	20120122	2012-01-22 00:00:00.000	22/01/2012	22	22nd	Sunday	1	7	2	2	2	22	4	4	4
12	20120123	2012-01-23 00:00:00.000	23/01/2012	23	23rd	Monday	2	1	2	2	2	23	4	4	4
13	20120124	2012-01-24 00:00:00.000	24/01/2012	24	24th	Tuesday	3	2	2	2	2	24	4	4	4
14	20120125	2012-01-25 00:00:00.000	25/01/2012	25	25th	Wednesday	4	3	2	2	2	25	4	4	4
15	20120126	2012-01-26 00:00:00.000	26/01/2012	26	26th	Thursday	5	4	3	3	3	26	4	4	4
16	20120127	2012-01-27 00:00:00.000	27/01/2012	27	27th	Friday	6	5	3	3	3	27	4	4	4

Query executed successfully.

LAPTOP-SRFD4QA (13.0 SP1) | LAPTOP-SRFD4QA\Prabodha | Accident_Warehouse | 00:00:00 789 rows

Ready

SQLQuery1.sql - not connected - Microsoft SQL Server Management Studio

File Edit View Project Tools Window Help

New Query Execute

Object Explorer

SQLQuery1.sql - not connected - [Adventure_Database]

```
***** Script for SelectTopNRows command from SSMS *****
--SELECT TOP (1000) [Adventure_Index]
,[Police_Force]
,[Accident_Severity]
,[Number_of_Vehicles]
,[Number_of_Casualties]
,[RoadKey]
,[ConditionsKey]
,[Accident_DateKey]
,[Total_Vehicles_That_Accidented_Within_a_day]
,[Total_death]
,[DriverKey]
,[LocationKey]
,[InsertedDate]
,[ModifiedDate]
FROM [Adventure_Warehouse].[dbo].[FactAccidentTbl]

TRUNCATE TABLE [dbo].[FactAccidentTbl]
```

Results Messages

Adventure_Index	Police_Force	Accident_Severity	Number_of_Vehicles	Number_of_Casualties	RoadKey	ConditionsKey	Accident_DateKey	Total_Vehicles_That_Accidented_Within_a_day	Total_death	DriverKey	LocationKey	InsertedDate
1	AC_058603	34	3	2	2234	2372	20120519	74	54	100	28291	2021-05-12 19:03:07.1
2	AC_058604	34	3	2	3701	2446	20120802	110	90	498	68992	2021-05-12 19:03:07.1
3	AC_058605	34	3	2	4177	982	20121129	83	63	596	25920	2021-05-12 19:03:07.1
4	AC_058606	34	3	1	1771	807	20131008	113	93	568	51207	2021-05-12 19:03:07.1
5	AC_058607	34	3	2	3105	967	20131008	42	22	637	17700	2021-05-12 19:03:07.1
6	AC_058608	34	3	2	3036	458	20121004	91	71	165	52795	2021-05-12 19:03:07.1
7	AC_058609	34	3	2	634	1409	20123413	140	120	897	37544	2021-05-12 19:03:07.1
8	AC_058610	34	3	2	1571	2483	20131124	85	45	247	7075	2021-05-12 19:03:07.1
9	AC_058611	34	3	1	2045	501	20130318	74	54	454	15900	2021-05-12 19:03:07.1
10	AC_058612	34	3	3	1172	1100	20140106	69	48	215	63567	2021-05-12 19:03:07.1
11	AC_058613	34	3	2	598	165	20120610	88	68	505	12311	2021-05-12 19:03:07.1
12	AC_058614	34	2	2	3809	1513	20121209	144	124	180	12962	2021-05-12 19:03:07.1
13	AC_058615	34	3	2	3813	1182	20121217	51	31	764	49784	2021-05-12 19:03:07.1
14	AC_058616	34	3	1	3334	1055	20130519	55	35	918	68988	2021-05-12 19:03:07.1
15	AC_058617	34	3	2	4074	8	20120304	76	56	125	13585	2021-05-12 19:03:07.1
16	AC_058618	34	3	2	385	1615	20121213	131	111	805	9595	2021-05-12 19:03:07.1

Disconnected.

Ready

SQLQuery30.sql - LAPTOP-5RFD4QAA Accident_Warehouse (LAPTOP-5RFD4QAA)\Prabodha (59)* - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

AdventureworksLT Adventure_Warehouse [Adventure_Warehouse] Execute New Query SQL Server Object Explorer

```

    , [age]
    ,[startDate]
    ,[endDate]
    ,[insertedDate]
    ,[modifiedDate]
FROM [Adventure_Warehouse].[dbo].[DimDriver]

select * from Adventure_Staging.dbo.DriverStaging a
where a.driver_id in (14)

select * from Adventure_Warehouse.dbo.DimDriver where alternateDriver_id in (14)

/*01
update Adventure_Staging.dbo.DriverStaging
set first_name = 'Josaf'
where driver_id in (14)
*/

```

Results Messages

driver_id	first_name	last_name	driver_address	email	phone	gender	age
14	Josaf	Cubino	05 Pleasure Parkway	josaf12@gmail.com	0202020202	M	21

driveSK alternateDriver_id first_name last_name driver_address email phone gender age startDate endDate insertedDate modifiedDate

driveSK	alternateDriver_id	first_name	last_name	driver_address	email	phone	gender	age	startDate	endDate	insertedDate	modifiedDate	
1	14	14	Bridie	Cubino	05 Pleasure Parkway	bculbinod@mtr.com	198-193-4405	M	21	2021-05-12 03:17:00.000	2021-05-13 09:46:09.000	NULL	NULL
2	1014	14	Bridie	Cubino	05 Pleasure Parkway	bculbinod@mtr.com	198-193-4405	M	21	2021-05-12 03:17:00.000	2021-05-13 09:46:09.000	NULL	NULL
3	2024	14	Josaf	Cubino	05 Pleasure Parkway	josaf12@gmail.com	0202020202	M	21	2021-05-13 00:48:09.000	NULL	2021-05-13 00:48:11.163	2021-05-13 00:48:11.163

Query executed successfully.

Ln 19 Col 2 Ch 2 INS 12:46 AM