

# **MIDTERM TEAM PROJECT**

## **FOOD INSPECTIONS ASSIGNMENT - A DATA ANALYST JOURNEY**

### **PROJECT OVERVIEW:**

The Food Inspections Assignment involves the analysis of food inspection data from the Department of Health Services of two cities – Chicago and Dallas. This documentation provides a comprehensive overview of the project's key components, data sources, and deliverables.

### **TEAM MEMBERS- GROUP 17:**

Anisha Gandhi

Anushka Paradkar

Dhir Thacker

Lakshmi Kumar

### **DELIVERABLES:**

#### **Part 1:**

- Get data in a delimited format (Recommended TSV)
- Load data into Stage table(s) (Prefix stage tables as stg\_ )
- Perform data profiling (Ydata profiling / Alteryx)

#### **Part 2**

- Design Dimensional Model
- Create DDL SQL script

#### **Part 3**

- Load dimensional model into Integration tables
- Using Talend read stage table(s) and load the model
- Name Dimensions and Facts with appropriate prefix such as dim\_ / fact\_

#### **Part 4**

- Create BI Dashboards

## DELIVERABLES - PART 1:

### STEP 1: GETTING THE DATA IN A DELIMITED FILE

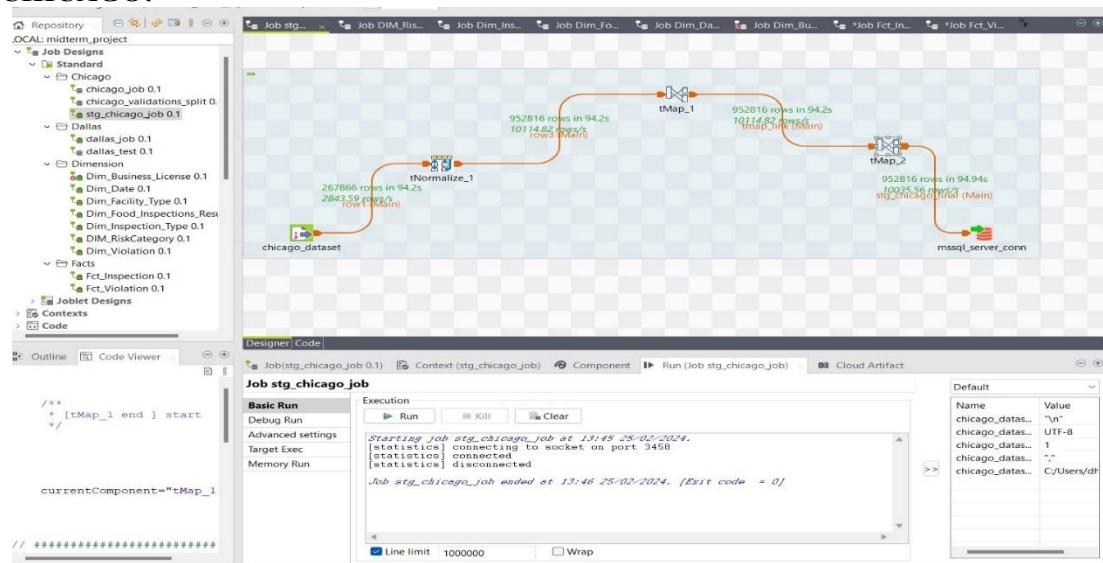
Got the open data for Chicago and Dallas from the following links:

- **CHICAGO:** [https://data.cityofchicago.org/Health-Human-Services/Food-Inspections/4ijn-s7e5/data\\_preview](https://data.cityofchicago.org/Health-Human-Services/Food-Inspections/4ijn-s7e5/data_preview)
- **DALLAS:** [https://www.dallasopendata.com/Services/Restaurant-and-Food-Establishment-Inspections-Octo/dri5-wcct/data\\_preview](https://www.dallasopendata.com/Services/Restaurant-and-Food-Establishment-Inspections-Octo/dri5-wcct/data_preview)

### STEP 2: LOADING DATA INTO STAGE TABLES

Loaded the TSV file into Stage tables on Talend

#### CHICAGO:



#### SQL OUTPUT:

SQLQuery3.sql - DHL...t (DHIR\dhirt (69))\*

SQLQuery1.sql - DHL...t (DHIR\dhirt (52))\* SQLQuery36.sql - not connected

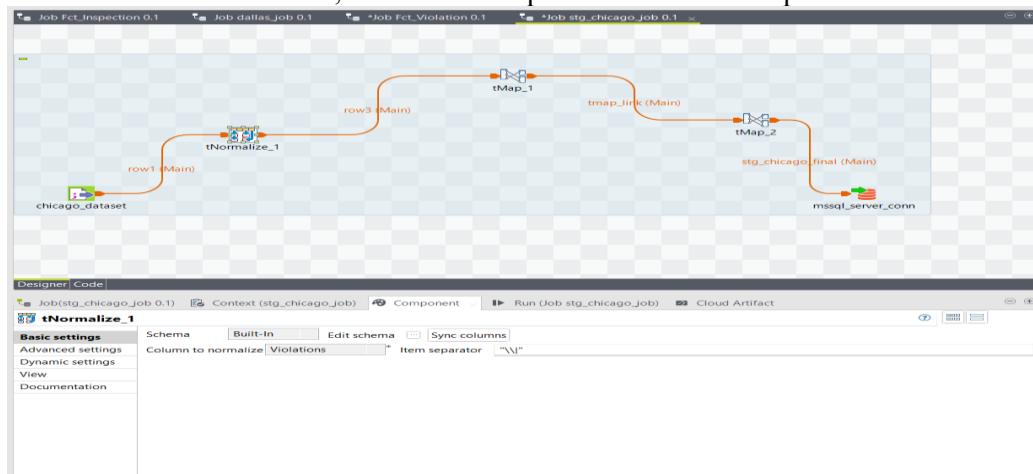
chicago_SK	Inspection_ID	DBA_Name	AKA_Name	License	Facility_Type	Risk	Address	City	State	Zip	Inspection_Date
1	2589772	Thomas, Velma ECC	Thomas, Velma ECC	26891	School	Risk 1 (High)	3625 S Hoyne (2100W) (St. Maurice)	CHICAGO	IL	60609	2024-02-20 00:00:00
2	2589727	MOCCHI DONUT FRENCH MARKET	MOCCHI DONUT FRENCH MARKET	2952387	Restaurant	Risk 2 (Medium)	131 N CLINTON	CHICAGO	IL	60661	2024-02-16 00:00:00
3	2589712	PONCE RESTAURANT	PONCE RESTAURANT	2423715	Restaurant	Risk 1 (High)	4313 W FULLERTON AVE	CHICAGO	IL	60639	2024-02-16 00:00:00
4	2589712	PONCE RESTAURANT	PONCE RESTAURANT	2423715	Restaurant	Risk 1 (High)	4313 W FULLERTON AVE	CHICAGO	IL	60639	2024-02-16 00:00:00
5	2589712	PONCE RESTAURANT	PONCE RESTAURANT	2423715	Restaurant	Risk 1 (High)	4313 W FULLERTON AVE	CHICAGO	IL	60639	2024-02-16 00:00:00
6	2589712	PONCE RESTAURANT	PONCE RESTAURANT	2423715	Restaurant	Risk 1 (High)	4313 W FULLERTON AVE	CHICAGO	IL	60639	2024-02-16 00:00:00
7	2589712	PONCE RESTAURANT	PONCE RESTAURANT	2423715	Restaurant	Risk 1 (High)	4313 W FULLERTON AVE	CHICAGO	IL	60639	2024-02-16 00:00:00
8	2589712	PONCE RESTAURANT	PONCE RESTAURANT	2423715	Restaurant	Risk 1 (High)	4313 W FULLERTON AVE	CHICAGO	IL	60639	2024-02-16 00:00:00
9	2589712	PONCE RESTAURANT	PONCE RESTAURANT	2423715	Restaurant	Risk 1 (High)	4313 W FULLERTON AVE	CHICAGO	IL	60639	2024-02-16 00:00:00
10	2589712	PONCE RESTAURANT	PONCE RESTAURANT	2423715	Restaurant	Risk 1 (High)	4313 W FULLERTON AVE	CHICAGO	IL	60639	2024-02-16 00:00:00
11	2589712	PONCE RESTAURANT	PONCE RESTAURANT	2423715	Restaurant	Risk 1 (High)	4313 W FULLERTON AVE	CHICAGO	IL	60639	2024-02-16 00:00:00
12	2589712	PONCE RESTAURANT	PONCE RESTAURANT	2423715	Restaurant	Risk 1 (High)	4313 W FULLERTON AVE	CHICAGO	IL	60639	2024-02-16 00:00:00
13	2589712	PONCE RESTAURANT	PONCE RESTAURANT	2423715	Restaurant	Risk 1 (High)	4313 W FULLERTON AVE	CHICAGO	IL	60639	2024-02-16 00:00:00
14	2589712	PONCE RESTAURANT	PONCE RESTAURANT	2423715	Restaurant	Risk 1 (High)	4313 W FULLERTON AVE	CHICAGO	IL	60639	2024-02-16 00:00:00
15	2589712	PONCE RESTAURANT	PONCE RESTAURANT	2423715	Restaurant	Risk 1 (High)	4313 W FULLERTON AVE	CHICAGO	IL	60639	2024-02-16 00:00:00
16	2589712	PONCE RESTAURANT	PONCE RESTAURANT	2423715	Restaurant	Risk 1 (High)	4313 W FULLERTON AVE	CHICAGO	IL	60639	2024-02-16 00:00:00
17	2589712	PONCE RESTAURANT	PONCE RESTAURANT	2423715	Restaurant	Risk 1 (High)	4313 W FULLERTON AVE	CHICAGO	IL	60639	2024-02-16 00:00:00
18	2589712	PONCE RESTAURANT	PONCE RESTAURANT	2423715	Restaurant	Risk 1 (High)	4313 W FULLERTON AVE	CHICAGO	IL	60639	2024-02-16 00:00:00
19	2589712	PONCE RESTAURANT	PONCE RESTAURANT	2423715	Restaurant	Risk 1 (High)	4313 W FULLERTON AVE	CHICAGO	IL	60639	2024-02-16 00:00:00
20	2589716	NIGERIAN KITCHEN INCORPORATED	NIGERIAN KITCHEN INCORPORATED	2405266	Restaurant	Risk 1 (High)	4447 N BROADWAY	CHICAGO	IL	60640	2024-02-16 00:00:00
21	2589716	NIGERIAN KITCHEN INCORPORATED	NIGERIAN KITCHEN INCORPORATED	2405266	Restaurant	Risk 1 (High)	4447 N BROADWAY	CHICAGO	IL	60640	2024-02-16 00:00:00
22	2589716	NIGERIAN KITCHEN INCORPORATED	NIGERIAN KITCHEN INCORPORATED	2405266	Restaurant	Risk 1 (High)	4447 N BROADWAY	CHICAGO	IL	60640	2024-02-16 00:00:00
23	2589716	NIGERIAN KITCHEN INCORPORATED	NIGERIAN KITCHEN INCORPORATED	2405266	Restaurant	Risk 1 (High)	4447 N BROADWAY	CHICAGO	IL	60640	2024-02-16 00:00:00
24	2589716	NIGERIAN KITCHEN INCORPORATED	NIGERIAN KITCHEN INCORPORATED	2405266	Restaurant	Risk 1 (High)	4447 N BROADWAY	CHICAGO	IL	60640	2024-02-16 00:00:00
25	2589716	NIGERIAN KITCHEN INCORPORATED	NIGERIAN KITCHEN INCORPORATED	2405266	Restaurant	Risk 1 (High)	4447 N BROADWAY	CHICAGO	IL	60640	2024-02-16 00:00:00

Query executed successfully.

Ln 76 Col 1 Ch 1 INS DHIR (16.0 RTM) | DHIR\dhirt (52) | midterm\_project | 00:00:00 | 100 rows

## COMPONENTS USED AND OBSERVATIONS:

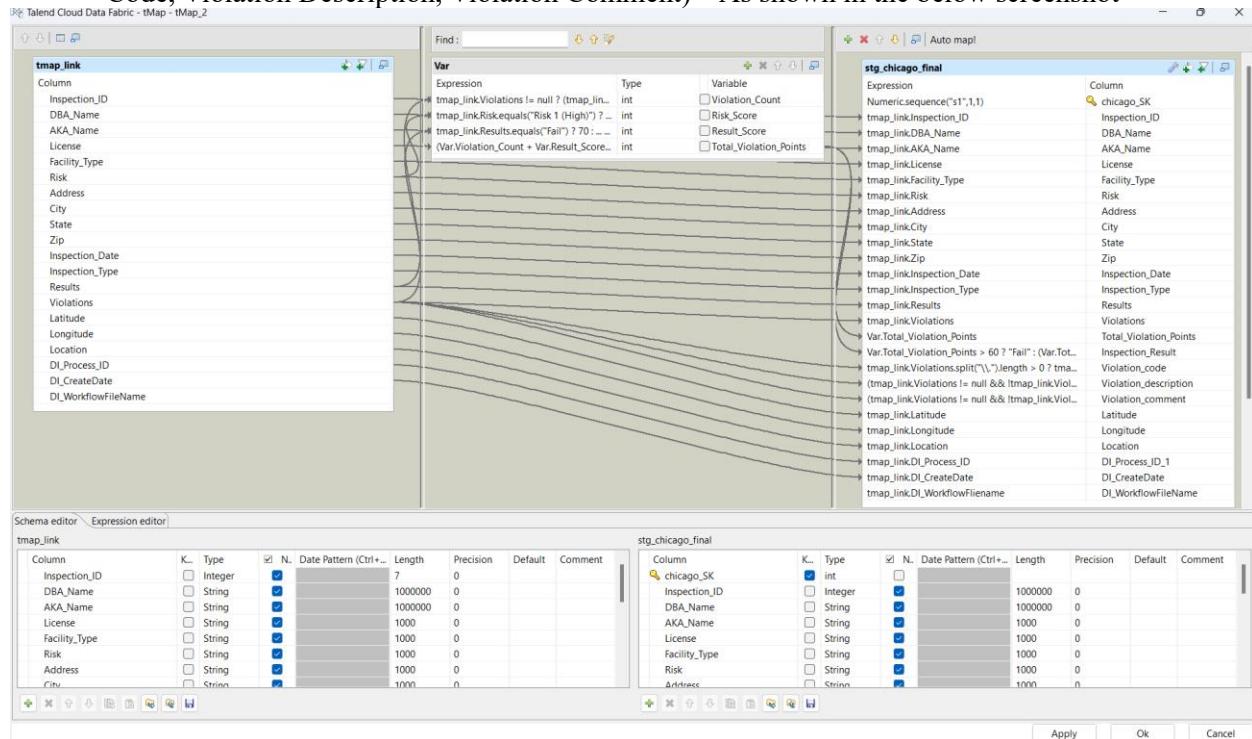
- Added the Chicago dataset in CSV format.
- Processed 952816 rows in 94.94 seconds.
- Used T-normalize to normalize data in Violations column. There was more than 1 violation found in the Violations cell, and hence we split it into 1 violation per record.



- Two T-map components have been used
- The first T-map: Added three functions (DI\_Process\_ID, DI\_CurrentDate, DI\_WorkflowFileName)- As shown in the below screenshots

pid	DI_Process_ID
TalendDate.getCurrentDate()	DI_CurrentDate
context.chicago_dataset_File	DI_WorkflowFileName

- Second T-map has been used to split the Violations into multiple columns (Violations, Violation Code, Violation Description, Violation Comment) – As shown in the below screenshot



- Regex for Violation\_Count, Risk\_Score, Result\_Score, Total\_Violation\_points.

### Violation\_Count

Expression Builder

Expression

```
tmap_link.Violations != null ?  
(tmap_link.Violations.equals("") ? 0 : 2 *  
(tmap_link.Violations.split("\\|").length))  
: 0
```

Test

Var	Va
tmap_link.In...	nu
tmap_link.D...	nu
tmap_link.A...	nu
tmap_link.Li...	nu
tmap_link.Fa...	nu
tmap_link.Ri...	nu
tmap_link.A...	nu

Add Remove

Categories

- \*All
- \*User Defined
- DataOperation
- Mathematical
- Numeric
- Relational
- SQLike
- StringHandling
- TalendDataGenerator

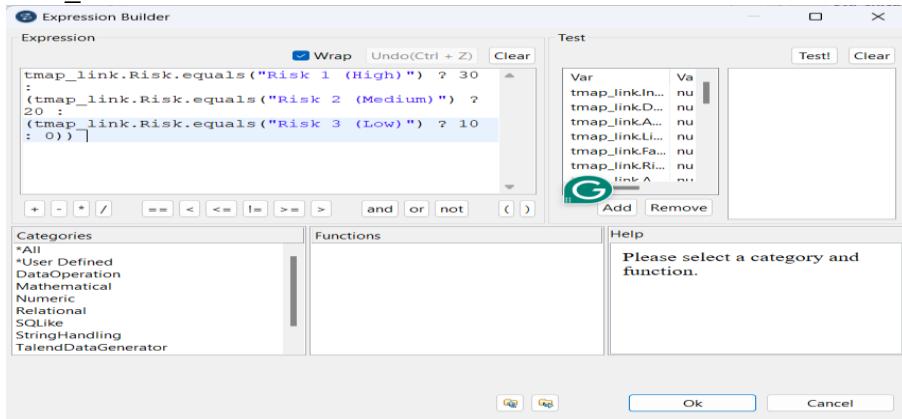
Functions

Help

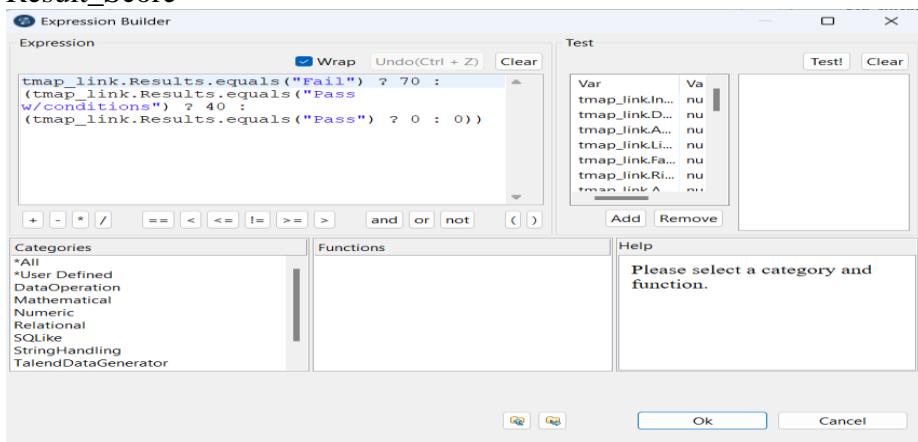
Please select a category and function.

Ok Cancel

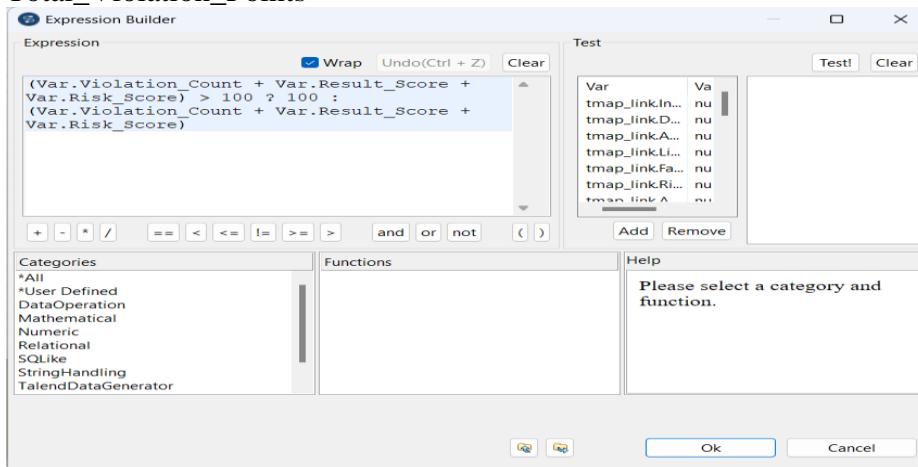
## Risk\_Score



## Result\_Score

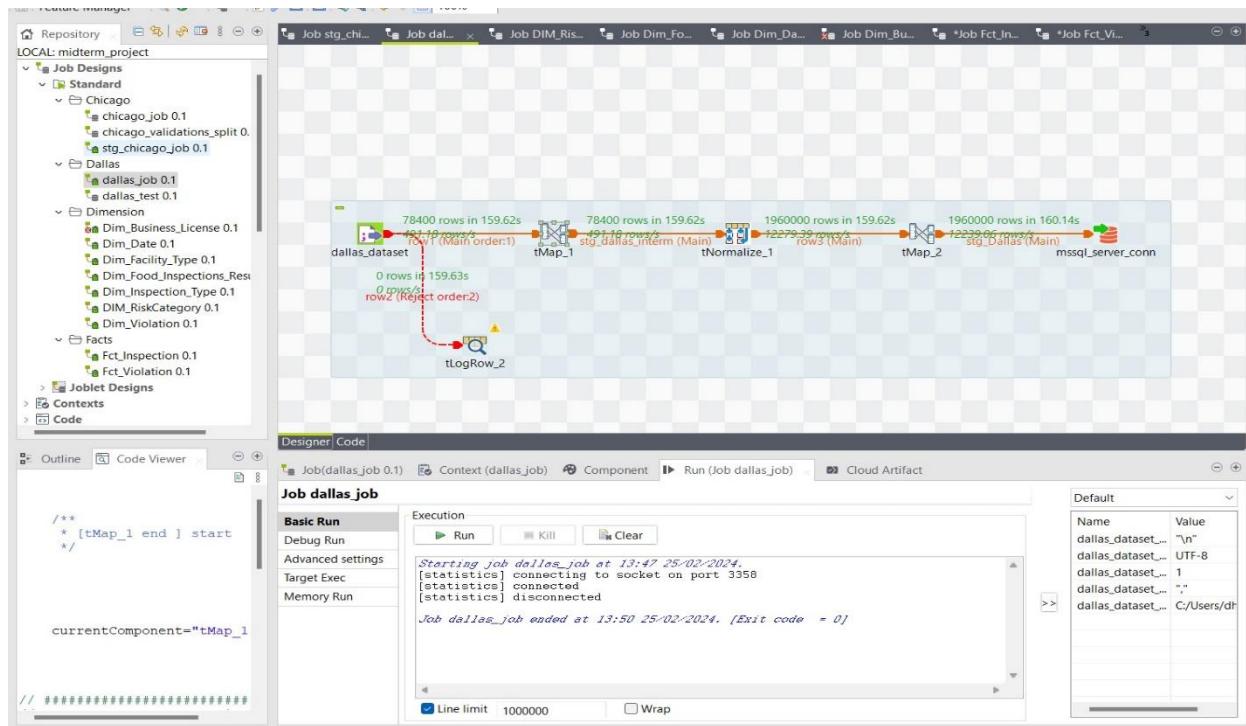


## Total\_Violation\_Points



- Finally, everything has been mapped to the output server – Microsoft SQL Server

## DALLAS:



## SQL OUTPUT:

SQLQuery3.sql - DHIR\dhirt (69)\* SQLQuery1.sql - DHIR\dhirt (52)\* SQLQuery36.sql - not connected

```

73
74
75
76 SELECT TOP 100 * FROM stg_chicago;
77
78
79 select top 100 * from stg_data_dallas
80
81

```

Results

Dallas_SK	Restaurant_Name	Inspection_Type	Inspection_Date	Inspection_Score	Street_Number	Street_Name	Street_Direction	Street_Type	Street_Unit	Street_Address	Zip_Code	Violation_Code
1	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
2	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
3	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
4	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
5	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
6	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
7	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
8	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
9	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
10	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
11	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
12	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
13	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
14	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
15	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
16	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
17	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
18	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
19	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
20	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
21	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
22	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
23	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
24	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
25	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	

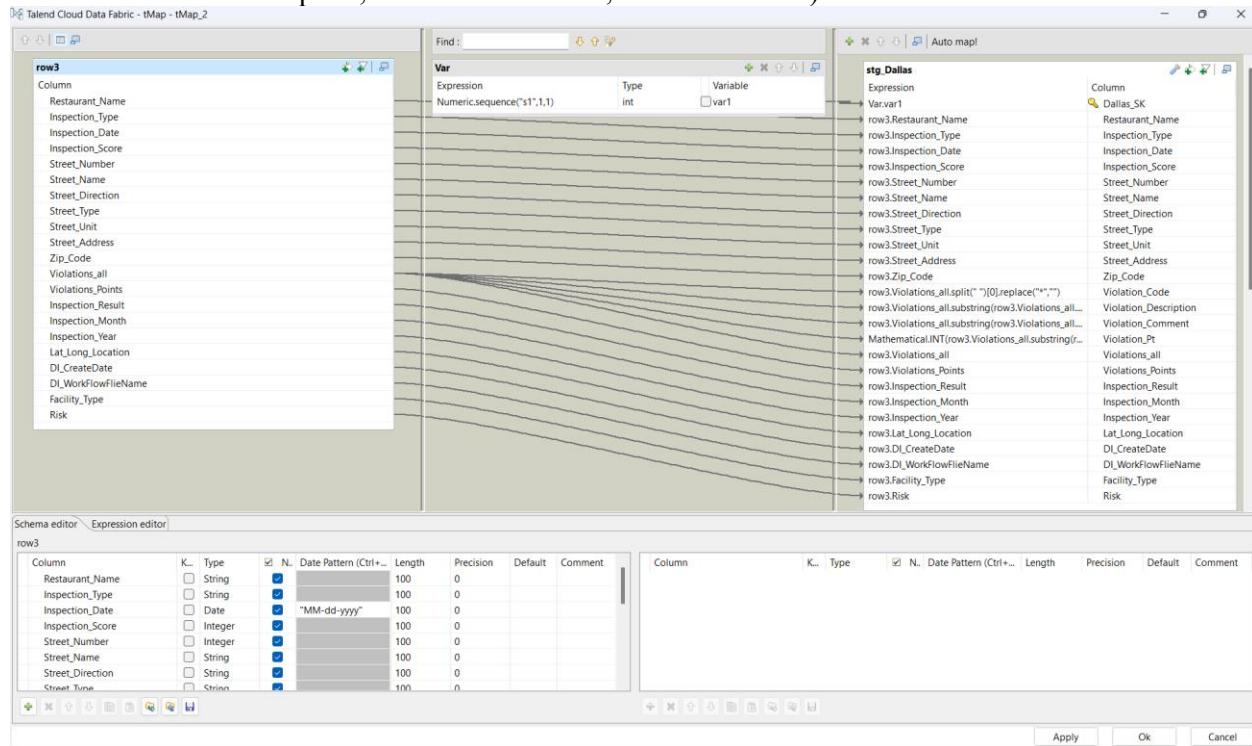
Query executed successfully. DHIR (16.0 RTM) | DHIR\dhirt (52) | midterm\_project | 00:00:00 | 100 rows

## COMPONENTS USED AND OBSERVATIONS:

- Added the Dallas dataset in CSV format.
- Processed 1960000 rows in 160.14 seconds
- No reject rows have been found.
- Two T-map components have been used
- First T-map: All the violations are found in a split state in the CSV file (Violation Memo, Violation Detail, Violation Description, Violation Comment). Combines all of them into a single column (Violations All). Added a separate column (Violation Points) for calculations. – As shown in the below screenshot

- Used the t-normalize component to Split the Violations in a cleaner manner, using item separator symbol ("\\|")

- Second T-map: The Violations All column has been split into four columns (Violation Code, Violation Description, Violation Comment, Violation Points) – As shown in the screenshot below.



- Two functions (DI\_CurrentDate and DI\_WorkflowFileName) have been added.
- Created two columns Risk and Facility\_Type and gave them a default value.
- Finally, everything has been mapped to the output server – Microsoft SQL Server.

### **STEP 3: DATA PROFILING**

**USAGE:** Understood the layout of tables, fields, and the relationships between different data elements. It helped us in understanding how the data is organized.

#### a) USING Y-DATA PROFILING

##### 1) FOOD INSPECTIONS – CHICAGO

##### **DATASET STATISTICS:**

- The given dataset consists of **17 variables** and **267866 observations**.
- There are **84184 missing cells**, which account up to **1.8%** of the total values
- There are **no duplicate values**.

##### **VARIABLES:**

- Numeric: 5 (Inspection ID, License#, Zip, Latitude, Longitude)
- Text: 8(DBA Name, AKA Name, Facility type, Address, City, Inspection Type, Violations, Location)
- Categorical: 3(Risk, State, Results)

- Date Time: 1(Inspection Date)

### **OBSERVATIONS:**

- Facility type and Violations have 1.9% (5120) and 27.4 % (73445) missing values

## 2) FOOD INSPECTIONS – DALLAS

### **DATASET STATISTICS:**

- The given dataset consists of **114 variables** and **78400 observations**.
- There are **6454357 missing cells**, which account up to **72.2%** of the total values
- There are **42 duplicate** values.

### **VARIABLES:**

- Numeric: 2 (Inspection Score, Street Number)
- Text: 82(75 records - Violation Description-1, Violation Memo-1, Violation Detail -1 through Violation Description-25, Violation Memo-25, Violation Detail -25, Restaurant Name, Street Name, Street Unit, Street Address, Zip code, Inspection Month, Lat Long Location)
- Date Time: 1(Inspection Date)
- Categorical: 29 (25 records - Violation Points-1 through Violation Points-25, Inspection Type, Street Direction, Street Type, Inspection Year)

### **OBSERVATIONS:**

- The dataset has 42 duplicate rows, that accounts to 0.1% of the total data
- Total Missing values for Violation Description: 195,482, Violation Points: 195,482, Violation Detail: 195,489, Violation Memo: 195,513.
- Missing Percentage Violation Description: 99.534%, Violation Points: 99.534%, Violation Detail: 99.535%, Violation Memo: 99.539%.

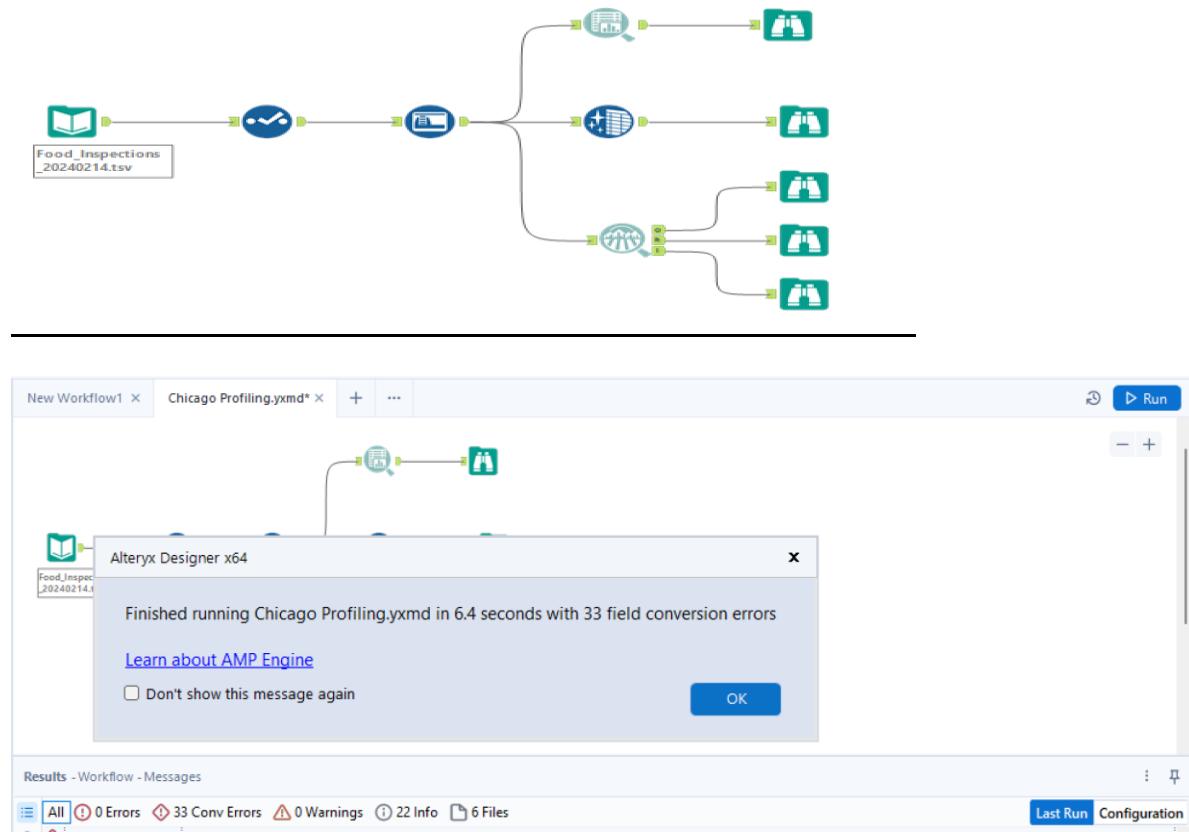
### b) USING ALTERYX

## 1) FOOD INSPECTIONS - CHICAGO

### **ISSUES FOUND AND RESOLUTION:**

- Inspection data was in String instead of date.
- Violations Column was getting truncated.

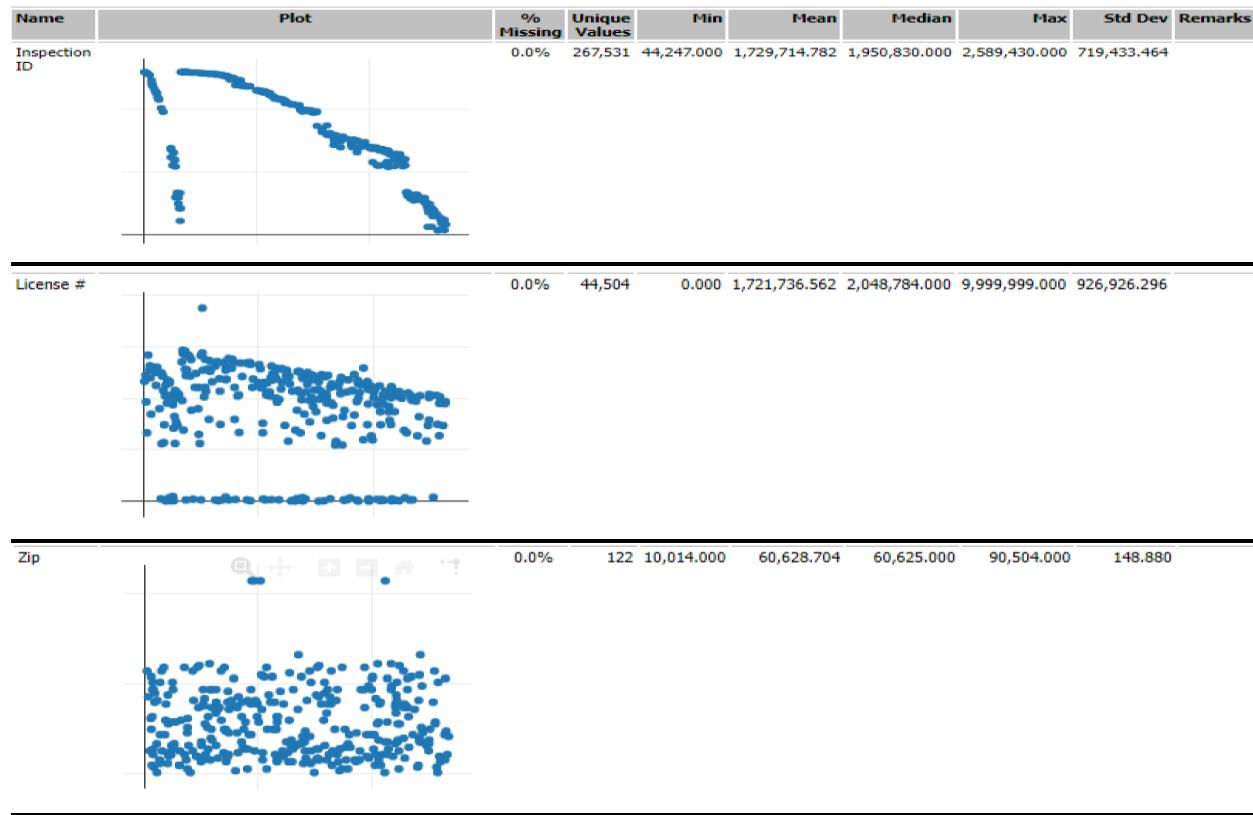
## ALTERYX PROFILING:



## **REPORT:**

### **NUMERIC VALUES:**

(Inspection ID, License#, Zip)



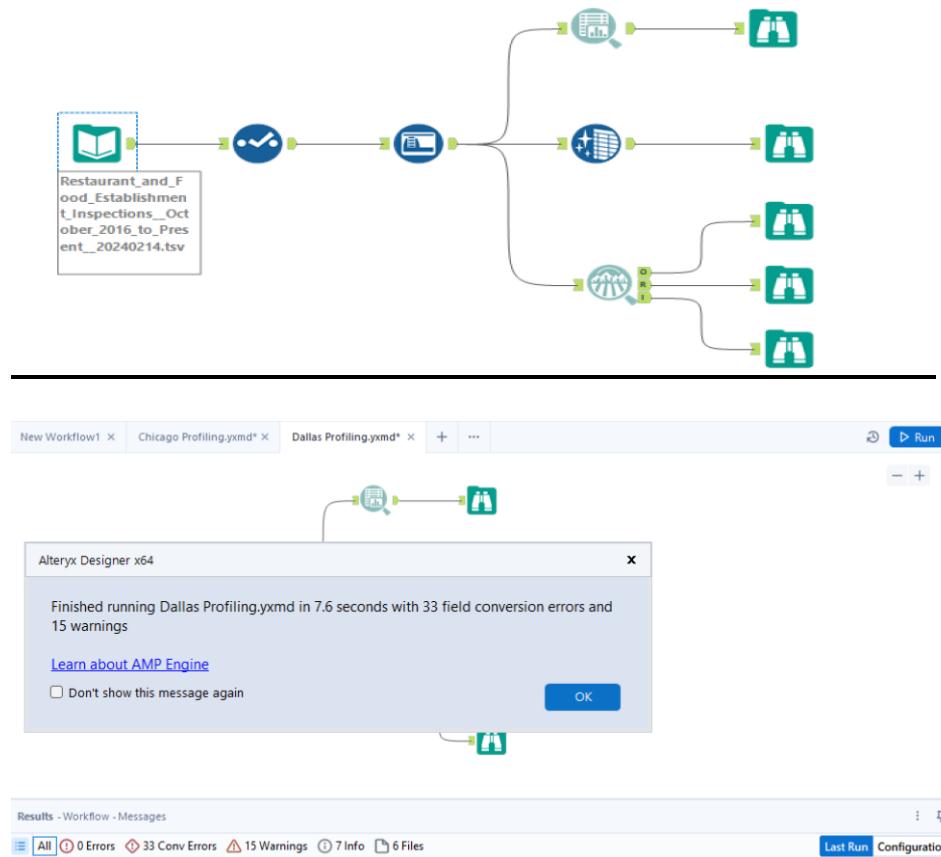
### **CHARACTER/STRING FIELDS:**

Name	% Missing	Unique Values	Shortest Value	Longest Value	Min Value Count	Max Value Count	Remarks
AKA Name	0.9%	30,615	EL	MAE'S EARLY CHILDHOOD DEVELOPMENT AND THERAPEUTIC DAY CARE CENTER, INCORPORATED	1	4,370	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Longitude	0.3%	18,211	-87.669464645	-87.65901954921286	1	3,291	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Address	0.0%	19,639		1400 S JEAN BAPTISTE POINTE DUSABLE LAKESHORE DRIVE	1	3,273	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
State	0.0%	6	IL	IL	1	267,461	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.

DBA Name	0.0%	32,165	N	MAE'S EARLY CHILDHOOD DEVELOPMENT AND THERAPEUTIC DAY CARE CENTER, INCORPORATED	1	3,552	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Latitude	0.3%	18,211	41.786130727	41.677685065833224	1	3,291	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
City	0.1%	79	alsip	BANNOCKBURNDEER FIELD	1	266,472	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violations	27.4%	166,051	63. REMOVAL OF SUSPENSION SIGN	2. CITY OF CHICAGO FOOD SERVICE SANITATION CERTIFICATE - Comments: OBSERVED FACILITY FOOD HANDLERS PREPARING AND HANDLING IN TIME AND TEMPERATURE CONTROL FOR SAFETY(TCS) FOODS WITHOUT ORIGINAL CITY OF CHICAGO FOOD SERVICE MANAGER AND CERTIFICATE ON SITE.	1	73,340	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Risk	0.0%	5	All	Risk 2 (Medium)	52	196,048	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Location	0.3%	18,211	(41.9960984214, -87.7868769104594)	(41.677685065833224, -87.65901954921286)	1	3,291	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Inspection Type	0.0%	111	SFP	LICENSE TASK FORCE / NOT -FOR-PROFIT CLUB	1	139,061	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Inspection Date	0.0%	3,562	02/08/2024	02/08/2024	1	185	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Facility Type	1.9%	514	bar	Mobile Frozen Dessert Dispenser_non Motorized.	1	179,811	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Results	0.0%	7	Pass	Business Not Located	86	137,733	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.

## **2) FOOD INSPECTIONS - DALLAS**

### **ALTERYX PROFILING:**



### **REPORT:**

Name	% Missing	Unique Values	Shortest Value	Longest Value	Min Value Count	Max Value Count	Remarks
Violation Points - 1	8.40%	5	2	2	1	27,830	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Street Unit	64.40%	987	3	#3000	1	49,947	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.

Violation Memo - 21	99.90%	61	salsa	Equipment and single use utensils contaminated by trash container located inside shelving area must be remove equipment and discard single use utensils contaminated by the trash receptacle inside shelving area	1	77,462	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Memo - 11	92.80%	4,696	BAR	Reach in cooler near cooking line. Olives 48.6°F Cooked chopped chicken 48.2°F Make sure employees have probe thermometers (and the training to avoid contamination by improperly sanitized equipment) to audit foods such that foods out of temperature	1	71,906	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Detail - 23	100.00%	17	228.173 Physical Facilities. Floors, walls, and ceilings. (e) Floor covering, mats and duckboards. Mats and duckboards shall be designed to be removable and easily cleanable.	§228.33. Certified Food Protection Manager and Food Handler Requirements (d) Except in a temporary food establishment and the certified food manager, all food employees shall successfully complete an accredited food handler training course, within 60 da	1	77,506	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Points - 2	18.00%	5	1	1	1	25,650	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Memo - 7	75.00%	15,736	LA	Need a choking poster in the dining area. "SEC. 17-11.2. ADDITIONAL REQUIREMENTS. [Reserved.] Amend Chapter 17, "Food Establishments" - Page 36 (a) General. All food establishments that provide dining areas shall post the Heimlich maneuver sign in	1	58,179	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Street Number	0.00%	3,442	0	10295	1	562	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Detail - 18	99.60%	130	228.210 Poisonous or Toxic Materials. First Aid Supplies, Availability. A first aid kit shall be provided.	228.35 Management and Personnel. Responsibilities and Reporting Symptoms and Diagnosis. (f) A food employee shall: (2) comply with a restriction as specified in §228.36(4)(B), (5)(B), (6)(B), (7), (8)(B), or §228.36 (8), (9), or (10) a	1	77,184	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Memo - 19	99.80%	161	CLEAN ALL	cooler units in all areas including frame and gaskets doors dirty with mold, soils and grease deposits must be clean to avoid cross contamination WI cooler dirty with soils and grease accumulations must be clean to avoid cross contamination	1	77,358	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.

Street Type	2.10%	20	RD	BLVD	40	19,204	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Memo - 10	89.20%	6,895	PIC	missing skirt on wall prep area must be repair all gaps to avoid pest harboring missing weather strip at back exit door must have weather strip to avoid pest entry holes on walls in all areas must be repair or cover in all walls to avoid pest h	1	69,126	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Detail - 14	97.60%	249	228.120 Equipment, Utensils, and Linens. Laundering, Frequency, Specifications. (d) Wet wiping cloths shall be laundered daily.	228.35 Management and Personnel. Responsibilities and Reporting Symptoms and Diagnosis. (f) A food employee shall: (2) comply with a restriction as specified in 6228.36(4)(B), (5)(B), (6)(B), (7), (8)(B), or 6228.36 (8), (9), or (10) a	1	75,697	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Points - 6	60.30%	4	1	1	6,587	46,765	This field has over 10% missing values. Consider imputing these values.
Violation Memo - 4	54.20%	28,436	a	Reach in cooler thermometers are not accurate at back (SW corner) of store. One thermometer displays 58°F, another 33°F. The sensor for the thermometer displaying 33°F is directly attached to exhaust vent of condenser unit. this is the coldest area of refer	1	41,982	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Description - 8	75.80%	480	*23 No Water	*05 Reheat from 41°F to 165°F within 2 hours and/or Commercially processed RTE foods reheated from 4	1	58,743	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Memo - 24	100.00%	12	Bulk items	reseal hand sink to wall near 3 com sink clean the floor throughout the kitchen area cover floor drain in grill area seal opening above the bag-n box check interior of walk-in cooler	1	77,512	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Restaurant Name	0.00%	9,101	KFC	50326 THE TRADITION-PRESTONWOOD ASSISTED LIVING AND MEMORY-4TH FL	1	524	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.

Violation Description - 10	87.00%	411	*23 No Water	*05 Reheat from 41°F to 165°F within 2 hours and/or Commercially processed RTE foods reheated from 4	1	67,479	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Description - 4	40.60%	585	*23 No Water	*05 Reheat from 41°F to 165°F within 2 hours and/or Commercially processed RTE foods reheated from 4	1	31,438	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Detail - 8	76.10%	428	228.210 Poisonous or Toxic Materials. First Aid Supplies, Availability. A first aid kit shall be provided.	228.35 Management and Personnel. Responsibilities and Reporting Symptoms and Diagnosis. (f) A food employee shall: (2) comply with a restriction as specified in §228.36(4)(B), (5)(B), (6)(B), (7), (8)(B), or §228.36 (8), (9), or (10) a	1	58,991	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Detail - 2	18.70%	548	228.210 Poisonous or Toxic Materials. First Aid Supplies, Availability. A first aid kit shall be provided.	228.35 Management and Personnel. Responsibilities and Reporting Symptoms and Diagnosis. (f) A food employee shall: (2) comply with a restriction as specified in §228.36(4)(B), (5)(B), (6)(B), (7), (8)(B), or §228.36 (8), (9), or (10) a	1	14,525	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Points - 16	98.90%	4	1	1	184	76,650	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Detail - 11	91.50%	341	228.210 Poisonous or Toxic Materials. First Aid Supplies, Availability. A first aid kit shall be provided.	228.35 Management and Personnel. Responsibilities and Reporting Symptoms and Diagnosis. (f) A food employee shall: (2) comply with a restriction as specified in §228.36(4)(B), (5)(B), (6)(B), (7), (8)(B), or §228.36 (8), (9), or (10) a	1	70,908	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Description - 22	100.00%	25	*23 No Water	*09 Food protected cross contamination separating types of raw animal food storage, preparation, hold	1	77,492	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.

Violation Description - 17	99.30%	176	*23 No Water	*39 In-use utensils, between-use storage. During pauses in food preparation or dispensing, food prep	1	76,983	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Zip Code	0.00%	155	75237	75238-2632	1	4,676	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Memo - 2	37.30%	38,374	d	Need NO Smoking sign at front door. Below is the City of Dallas Code: SECTION 2. That Subsection (a) of Section 4 1-2, "Smoking Prohibited in Certain Areas," of Article II, "Smoking Prohibitions," of Chapter 41, "Smoking," of the Dallas City Code	1	28,941	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Detail - 15	98.30%	214	228.210 Poisonous or Toxic Materials. First Aid Supplies, Availability. A first aid kit shall be provided.	228.80 Food. Consumer advisory. (a) Except as specified in §228.71(a)(3), (a)(4)(D) and §228.82(3) of this title, if an animal food such as beef, eggs, fish, lamb, milk, pork, poultry, or shellfish is served or sold raw, undercooked, or wit	1	76,242	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Description - 7	68.60%	494	*23 No Water	*05 Reheat from 41°F to 165°F within 2 hours and/or Commercially processed RTE foods reheated from 4	1	53,208	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Memo - 13	97.20%	1,966	WIC	SEC. 17-11.2. ADDITIONAL REQUIREMENTS. (a) General. All food establishments that provide dining areas shall post the Heimlich maneuver sign in a place conspicuous to employees and customers. (b) Specifications: The sign shall: (1) be	1	75,357	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Detail - 19	99.70%	89	228.75 Food. Time and temperature control. (a) Frozen food. Stored frozen foods shall be maintained frozen.	228.186 Physical Facilities. Premises, buildings, systems, rooms, fixtures, equipment, devices, and materials. (i) Closing toilet room doors. Toilet room doors as specified in §228.174(d) of this title shall be kept closed except dur	1	77,322	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.

Violation Detail - 6	60.80%	487	228.210 Poisonous or Toxic Materials. First Aid Supplies, Availability. A first aid kit shall be provided.	228.35 Management and Personnel. Responsibilities and Reporting Symptoms and Diagnosis. (f) A food employee shall: (2) comply with a restriction as specified in §228.36(4)(B), (5)(B), (6)(B), (7), (8)(B), or §228.36 (8), (9), or (10) a	1	47,147	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Memo - 22	100.00%	30	label 3 comp sink	light shields removed in back storage area replace missing vent a hood filters food employees must focus on one task at a time food staff recommend have cleaning bucket label mop sink recommend a small cart to store dirty dishes provide lids for b	1	77,494	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Detail - 3	30.00%	547	228.210 Poisonous or Toxic Materials. First Aid Supplies, Availability. A first aid kit shall be provided.	228.35 Management and Personnel. Responsibilities and Reporting Symptoms and Diagnosis. (f) A food employee shall: (2) comply with a restriction as specified in §228.36(4)(B), (5)(B), (6)(B), (7), (8)(B), or §228.36 (8), (9), or (10) a	1	23,233	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Points - 5	50.90%	5	1	1	1	39,491	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Memo - 23	100.00%	17	PROVIDE	cooking equipment dirty with soils and grease accumulations must be clean to avoid cross contamination	1	77,507	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Description - 14	97.60%	271	*23 No Water	*09 Food protected cross contamination by preparing each type of food at different times or in separate.	1	75,667	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Memo - 1	29.30%	43,237	.	OBSERVED ROACH GEL STORED IN BACK ROOM, ALSO OBSERVED A GALLON OF ORTHO PESTICIDE IN KITCHEN, REMOVE ALL RESTRICTED USE PESTICIDE FROM ESTABLISHMENT. SE OBSERVÓ GEL PARA CUCARACHAS ALMACENADO EN EL CUARTO DE ATRÁS, TAMBÍEN SE OBSERVÓ UN GALÓN DE PES	1	22,681	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.

Violation Memo - 20	99.90%	109	EMPLOYEES	using recycle non approved containers must be use approved commercial containers to avoid chemical contamination use of thank you bags as food containers must be have use approved commercial food containers to avoid chemical contamination	1	77,414	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Points - 25	100.00%	4	3	3	2	77,517	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Inspection Month	0.00%	88	Oct-19	Oct-19	248	1,347	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Description - 1	8.40%	624	*23 No Water	*05 Reheat from 41°F to 165°F within 2 hours and/or Commercially processed RTE foods reheated from 4	1	6,502	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Description - 12	94.60%	329	*23 No Water	*21 Person in charge. The person in charge shall ensure that §228.34 (1-15) Relating to Duties of PI	1	73,368	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Detail - 1	9.10%	561	228.210 Poisonous or Toxic Materials. First Aid Supplies, Availability. A first aid kit shall be provided.	228.35 Management and Personnel. Responsibilities and Reporting Symptoms and Diagnosis. (f) A food employee shall: (2) comply with a restriction as specified in §228.36(4)(B), (5)(B), (6)(B), (7), (8)(B), or §228.36 (8), (9), or (10) a	1	7,045	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Inspection Score	0.00%	58	0	100	1	6,487	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Detail - 4	41.20%	529	228.210 Poisonous or Toxic Materials. First Aid Supplies, Availability. A first aid kit shall be provided.	228.35 Management and Personnel. Responsibilities and Reporting Symptoms and Diagnosis. (f) A food employee shall: (2) comply with a restriction as specified in §228.36(4)(B), (5)(B), (6)(B), (7), (8)(B), or §228.36 (8), (9), or (10) a	1	31,908	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.

Violation Detail - 12	94.70%	294	228.210 Poisonous or Toxic Materials. First Aid Supplies, Availability. A first aid kit shall be provided.	228.35 Management and Personnel. Responsibilities and Reporting Symptoms and Diagnosis. (f) A food employee shall: (2) comply with a restriction as specified in §228.36(4)(B), (5)(B), (6)(B), (7), (8)(B), or §228.36 (8), (9), or (10) a	1	73,447	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Description - 6	60.30%	549	*23 No Water	*05 Reheat from 41°F to 165°F within 2 hours and/or Commercially processed RTE foods reheated from 4	1	46,765	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Description - 21	99.90%	50	*34 Pest Control	*09 Cooked ready to eat - Food protected from cross contamination by separating, storage, preparation	1	77,452	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Points - 19	99.70%	4	1	1	34	77,319	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Description - 9	81.90%	420	*23 No Water	*21 Person in charge. The person in charge shall ensure that §228.34 (1-15) Relating to Duties of PI	1	63,490	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Description - 3	29.30%	611	*23 No Water	*05 Reheat from 41°F to 165°F within 2 hours and/or Commercially processed RTE foods reheated from 4	1	22,723	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Memo - 8	80.50%	12,245	CO	SALSA PREPARED ON 10/4 TEMPERATURE WAS 65°F CHICHARON PREPARED ON 10/4 TEMPERATURE WAS 75.6°F SOUP BROTH PREPARED ON 10/4 TEMPERATURE WAS 65.9°F WATERMELON 47°F COOLER THERMOMETER 47°F - DOOR WAS AJAR WHEN INSPECTION BEGAN COS - VOLUNTARY DESTRUCTION	1	62,430	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.

Violation Detail - 16	98.90%	177	228.210 Poisonous or Toxic Materials. First Aid Supplies, Availability. A first aid kit shall be provided.	228.80 Food. Consumer advisory. (a) Except as specified in §228.71(a)(3), (a)(4)(D) and §228.82(3) of this title, if an animal food such as beef, eggs, fish, lamb, milk, pork, poultry, or shellfish is served or sold raw, undercooked, or wit	1	76,665	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Detail - 10	87.20%	370	228.210 Poisonous or Toxic Materials. First Aid Supplies, Availability. A first aid kit shall be provided.	228.35 Management and Personnel. Responsibilities and Reporting Symptoms and Diagnosis. (f) A food employee shall: (2) comply with a restriction as specified in §228.36(4)(B), (5)(B), (6)(B), (7), (8)(B), or §228.36 (8), (9), or (10) a	1	67,633	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Points - 23	100.00%	4	1	1	3	77,506	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Description - 25	100.00%	7	*47 Other Violations	*29 Cold/hot hold unit thermometer easily viewable	1	77,517	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Street Direction	67.00%	5	W	W	3,460	51,930	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Memo - 5	61.90%	23,874	33	Need a choking poster in the dining area. "SEC. 17-11.2. ADDITIONAL REQUIREMENTS. [Reserved.] Amend Chapter 17, "Food Establishments" - Page 36 (a) General. All food establishments that provide dining areas shall post the Heimlich maneuver sign in	1	47,967	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Memo - 14	98.00%	1,399	Raid	a/c vents and fan cover inside WI cooler units dirty with soils deposits, grease accumulations and dust must be clean to avoid cross contamination a/c filters dirty with dust, grease accumulations and soils deposits must be clean to avoid cross con	1	75,993	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Points - 4	40.60%	4	1	1	10,550	31,438	This field has over 10% missing values. Consider imputing these values.

Violation Memo - 25	100.00%	7	CLEAN ALL	Dirty dust on fans and vents above food prep areas and counters, dirty food containers, outside RIC doors, stoves, ovens, walls, vents, vent filters. Ice on freezer floor.	1	77,517	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Detail - 7	69.00%	447	228.210 Poisonous or Toxic Materials. First Aid Supplies, Availability. A first aid kit shall be provided.	228.35 Management and Personnel. Responsibilities and Reporting Symptoms and Diagnosis. (f) A food employee shall: (2) comply with a restriction as specified in §228.36(4)(B), (5)(B), (6)(B), (7), (8)(B), or §228.36 (8), (9), or (10) a	1	53,521	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Description - 13	96.60%	287	*23 No Water	*21 Person in charge. The person in charge shall ensure that §228.34 (1-15) Relating to Duties of PI	1	74,891	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Memo - 6	68.90%	19,536	T	RAW GROUND BEEF 47.2°F, ROAST BEEF 50°F (COOLER DRAWER THERMOMETER READING 49°F) HARD BOILED EGGS 46.9°F, TUNA SALAD 49.3°F, CHORIZO 45.3°F, RICE 46.0°F, SALSA 50.1°F, DICED HAM 45.1°F (COOLER THERMOMETER READING 41°F) RANCH DRESSING 46.6°F (THERMOMETER)	1	53,409	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Description - 11	91.30%	376	*23 No Water	*21 Person in charge. The person in charge shall ensure that §228.34 (1-15) Relating to Duties of PI	1	70,810	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Description - 20	99.80%	70	*47 Other Violations	*05 Reheat from 41°F to 165°F within 2 hours and/or Commercially processed RTE foods reheated from 4	1	77,394	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Points - 24	100.00%	3	1	1	3	77,512	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.

Street Name	0.00%	841	TI	MOUNTAIN CREEK PKWY #BU23	1	2,299	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Points - 13	96.60%	5	1	1	1	74,891	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Points - 15	98.30%	4	2	2	267	76,218	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Detail - 22	100.00%	24	228.224 REQUIREMENTS APPLICABLE TO CERTAIN ESTABLISHMENTS Outfitter Operations. (i) Equipment. All equipment and utensils intended for food contact shall be approved for food use.	228.35 Management and Personnel. Responsibilities and Reporting Symptoms and Diagnosis. (f) A food employee shall: (2) comply with a restriction as specified in §228.36(4)(B), (5)(B), (6)(B), (7), (8)(B), or §228.36 (8), (9), or (10) a	1	77,495	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Detail - 24	100.00%	10	228.149 Water, Plumbing, and Waste. Plumbing, operation and maintenance. (e) System maintained in good repair. A plumbing system shall be: (2) maintained in good repair.	228.106 Equipment, Utensils, and Linens. Functionality of equipment. (a) Ventilation hood systems, drip prevention. Exhaust ventilation hood systems in food preparation and ware washing areas including components such as hoods, fans, g	1	77,512	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Points - 17	99.30%	4	1	1	108	76,983	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Memo - 16	99.10%	672	TILE	Cooked beef brisket on counter showed temperature of 96.5°F No temperature logs were available at time of inspection. Cooling sauces of large number in walk in cooler were located adjacent to one another. With the number of foods prepared from a	1	76,797	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.

Violation Points - 18	99.60%	4	2	2	72	77,176	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Memo - 18	99.60%	278	90 F	obtain r fsm certificate from City of Dallas within 45 days Bring learn 2 serv certificate, DL or ID and money (cash, check, money order no credit or debit cards), \$30.00 per year. 7901 Goforth RD Dallas TX 75238 214 670 8083	1	77,237	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Inspection Year	0.00%	8	FY2020	FY2020	1,880	14,412	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Detail - 5	51.50%	504	228.210 Poisonous or Toxic Materials. First Aid Supplies, Availability. A first aid kit shall be provided.	228.35 Management and Personnel. Responsibilities and Reporting Symptoms and Diagnosis. (f) A food employee shall: (2) comply with a restriction as specified in §228.36(4)(B), (5)(B), (6)(B), (7), (8)(B), or §228.36 (8), (9), or (10) a	1	39,957	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Memo - 3	45.90%	33,505	p	Reach in cooler near ice machine temperature showed 60°F, 59.4°F, and 58°F throughout inspection. Please service equipment such that it maintains a temperature of 41°F or below. Also make sure doors remain closed as much as possible. Additionally, if	1	35,545	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Description - 24	100.00%	10	*39 Equipment and Utensils Storage	*46 Water, Plumbing, and Waste Plumbing Systems-good repair	1	77,512	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Memo - 17	99.40%	415	70	CLEAN INTERIOR OF COMPARTMENT SINK EXTERIOR OF REACH IN COOLERS MUST BE CLEANED & SANITIZED (INCLUDING EXTERIOR OF BLUE CONTAINERS) EXTERIOR OF COOKING EQUIPMENT MUST BE CLEANED & SANITIZED CLEAN MICROWAVE OVEN/ SMALL OVEN	1	77,086	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Points - 21	99.90%	4	3	3	15	77,452	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.

Violation Description - 16	98.90%	190	*45 First Aid	*05 Reheat from 41°F to 165°F within 2 hours and/or Commercially processed RTE foods reheated from 4	1	76,650	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Lat Long Location	0.00%	18,949	907 ELM ST	4351 DALLAS FORT WORTH TPKE #110 (32.768615587000056, -96.82313404199994)	1	147	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Points - 3	29.30%	5	1	1	3	24,360	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Inspection Type	0.00%	3	Routine	Complaint	30	76,571	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Points - 12	94.60%	4	1	1	810	73,368	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Description - 15	98.30%	235	*45 First Aid	*39 In-use utensils, between-use storage. During pauses in food preparation or dispensing, food prep	1	76,218	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Description - 5	50.90%	563	*23 No Water	*05 Reheat from 41°F to 165°F within 2 hours and/or Commercially processed RTE foods reheated from 4	1	39,491	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Detail - 25	100.00%	6	228.175 Physical Facilities. Handwashing Sinks. (c) Hand drying provision. Each handwashing lavatory or group of adjacent lavatories shall be provided with: (1) individual, disposable towels;	228.114 Equipment, Utensils, and Linens. Frequency of cleaning. (a) Equipment food-contact surfaces and utensils. (1) Equipment food-contact surfaces and utensils shall be cleaned: (E) at any time during the operation	1	77,518	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Description - 23	100.00%	17	*47 OTHER VIOLATIONS	*21 A establishment shall have written procedures for employees to follow when responding to vomiting	1	77,506	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.

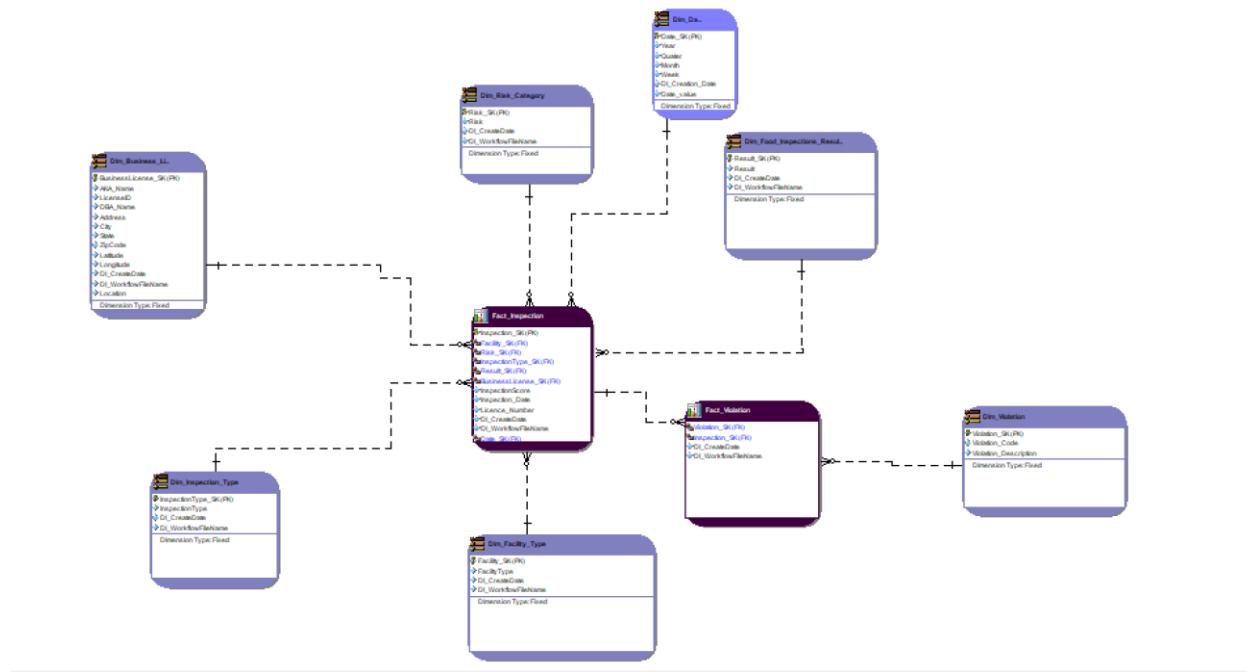
Violation Detail - 17	99.30%	166	228.75 Food. Time and temperature control. (a) Frozen food. Stored frozen foods shall be maintained frozen.	228.35 Management and Personnel. Responsibilities and Reporting Symptoms and Diagnosis. (f) A food employee shall: (2) comply with a restriction as specified in §228.36(4)(B), (5)(B), (6)(B), (7), (8)(B), or §228.36 (8), (9), or (10) a	1	76,993	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Description - 19	99.70%	94	*47 Other Violations	*09 Food protected cross contamination separating types of raw animal food storage, preparation, hol	1	77,319	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Points - 11	91.30%	4	1	1	1,345	70,810	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Inspection Date	0.00%	2,263	10/30/2019	10/30/2019	1	117	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Description - 2	18.00%	610	*23 No Water	*05 Reheat from 41°F to 165°F within 2 hours and/or Commercially processed RTE foods reheated from 4	1	13,943	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Detail - 21	99.90%	47	228.176 Physical Facilities. Toilets and urinals. (b) Toilet tissue, availability. A supply of toilet tissue shall be available at each toilet.	228.35 Management and Personnel. Responsibilities and Reporting Symptoms and Diagnosis. (f) A food employee shall: (2) comply with a restriction as specified in §228.36(4)(B), (5)(B), (6)(B), (7), (8)(B), or §228.36 (8), (9), or (10) a	1	77,457	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Detail - 20	99.80%	67	228.61 Food. Condition safe, unadulterated, and honestly presented. Food shall be safe, unadulterated, and, as specified in §228.78(b) of this title, honestly presented.	§228.33. Certified Food Protection Manager and Food Handler Requirements (d) Except in a temporary food establishment and the certified food manager, all food employees shall successfully complete an accredited food handler training course, within 60 da	1	77,400	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.

Violation Points - 20	99.80%	4	2	2	22	77,394	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Points - 9	81.90%	5	3	3	1	63,490	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Detail - 13	96.70%	256	228.210 Poisonous or Toxic Materials. First Aid Supplies, Availability. A first aid kit shall be provided.	228.80 Food. Consumer advisory. (a) Except as specified in §228.71(a)(3), (a)(4)(D) and §228.82(3) of this title, if an animal food such as beef, eggs, fish, lamb, milk, pork, poultry, or shellfish is served or sold raw, undercooked, or wit	1	74,945	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Memo - 15	98.60%	971	NONE	SEC. 17-11.2. ADDITIONAL REQUIREMENTS. (a) General. All food establishments that provide dining areas shall post the Heimlich maneuver sign in a place conspicuous to employees and customers. (b) Specifications: The sign shall: (1) be	1	76,459	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Street Address	0.00%	7,798	605 ELM ST	2310 MARTIN LUTHER KING JR BLVD #101	1	181	Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Points - 14	97.60%	4	1	1	412	75,667	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Points - 22	100.00%	4	2	2	2	77,492	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Memo - 9	85.20%	9,355	ALL	Raw shell eggs stored on the counter had temperature of 75.2°F. Management indicated that they are brought up to temperature prior to baking. If time is used as a control, written procedures should be in place, and logs maintained so as to ensure foods a	1	66,068	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.

Violation Points - 7	68.60%	5	1	1	1	53,208	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Points - 8	75.80%	4	2	2	4,002	58,743	This field has over 10% missing values. Consider imputing these values.
Violation Description - 18	99.60%	137	*45 First Aid	*21 Person in charge. The person in charge shall ensure that §228.34 (1-15) Relating to Duties of PI	1	77,176	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Detail - 9	82.20%	383	228.210 Poisonous or Toxic Materials. First Aid Supplies, Availability. A first aid kit shall be provided.	228.35 Management and Personnel. Responsibilities and Reporting Symptoms and Diagnosis. (f) A food employee shall: (2) comply with a restriction as specified in §228.36(4)(B), (5)(B), (6)(B), (7), (8)(B), or §228.36 (8), (9), or (10) a	1	63,699	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Memo - 12	95.60%	2,961	1	Employees did not follow the city amended regulations passed by the city of Dallas due to Covid 19. Employee had two kids ages 10 and 8 in the dining section for extended periods while she was in the kitchen. I spoke to the employee about this issue and s	1	74,108	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.
Violation Points - 10	87.00%	4	3	3	2,144	67,479	This field has over 10% missing values. Consider imputing these values. Some values of this field have a small number of value counts. If Appropriate, consider combining some value levels together.

## DELIVERABLES – PART 2:

### STEP 1: DESIGN DIMENSIONAL MODEL



#### Fact Tables:

- There are two fact tables – Inspection and Violation

#### Dimensions:

- There are seven dimensions connected to the fact tables – Business License, Inspection Type, Facility Type, Violation, Date, Risk Category and Food Inspection Results.

#### Schema:

- The dimensional model is designed using a star schema

### STEP 2: CREATE DDL SQL SCRIPT

#### CREATE SCRIPT - DDL SQL SCRIPT GENERATED FROM ER STUDIO

```
/*
 * ER/Studio Data Architect SQL Code Generation
 * Project : DimensionModel_Midterm.DM1
 *
 * Date Created : Sunday, February 25, 2024 06:28:00
 * Target DBMS : Microsoft SQL Server 2019
 */
```

```
USE midterm_project
```

```
go
/*
```

```
* TABLE: Dim_Business_License
*/
```

```
CREATE TABLE Dim_Business_License(
```

```

BusinessLicense_SK int      NOT NULL,
AKA_Name         char(10)   NULL,
LicenseID        int       NULL,
LegalName        varchar(255) NULL,
DBA_Name         varchar(255) NULL,
Address          varchar(255) NULL,
City             varchar(255) NULL,
State            varchar(255) NULL,
ZipCode          varchar(255) NULL,
Latitude         real      NULL,
Longitude        real      NULL,
DI_CreateDate    date     NULL,
DI_WorkflowFileName varchar(255) NULL,
Location         varchar(255) NULL,
CONSTRAINT PK5 PRIMARY KEY NONCLUSTERED (BusinessLicense_SK)
)

```

go

```

IF OBJECT_ID('Dim_Business_License') IS NOT NULL
    PRINT '<<< CREATED TABLE Dim_Business_License >>>'
ELSE
    PRINT '<<< FAILED CREATING TABLE Dim_Business_License >>>'
go

```

```

/*
 * TABLE: Dim_Date
 */

```

```

CREATE TABLE Dim_Date(
    Date_SK        char(10)  NOT NULL,
    Year           char(10)  NULL,
    Quater         char(10)  NULL,
    Month          char(10)  NULL,
    Week           char(10)  NULL,
    DI_Creation_Date char(10) NULL,
    DI_workflowFileName char(10) NULL,
    CONSTRAINT PK11 PRIMARY KEY NONCLUSTERED (Date_SK)
)

```

go

```

IF OBJECT_ID('Dim_Date') IS NOT NULL
    PRINT '<<< CREATED TABLE Dim_Date >>>'
ELSE
    PRINT '<<< FAILED CREATING TABLE Dim_Date >>>'
go

```

```

/*
 * TABLE: Dim_Facility_Type
 */

```

```

CREATE TABLE Dim_Facility_Type(
    Facility_SK    int      NOT NULL,

```

```
    FacilityType      varchar(255)  NULL,
    DI_CreateDate     datetime     NULL,
    DI_WorkflowFileName  varchar(255)  NULL,
    CONSTRAINT PK10 PRIMARY KEY NONCLUSTERED (Facility_SK)
)
```

```
go
```

```
IF OBJECT_ID('Dim_Facility_Type') IS NOT NULL
    PRINT '<<< CREATED TABLE Dim_Facility_Type >>>'
ELSE
    PRINT '<<< FAILED CREATING TABLE Dim_Facility_Type >>>'
go
```

```
/*
 * TABLE: Dim_Food_Inspections_Results
 */
```

```
CREATE TABLE Dim_Food_Inspections_Results(
    Result_SK        int         NOT NULL,
    Result          varchar(255)  NULL,
    DI_CreateDate    date        NULL,
    DI_WorkflowFileName  varchar(255)  NULL,
    CONSTRAINT PK8 PRIMARY KEY NONCLUSTERED (Result_SK)
)
```

```
go
```

```
IF OBJECT_ID('Dim_Food_Inspections_Results') IS NOT NULL
    PRINT '<<< CREATED TABLE Dim_Food_Inspections_Results >>>'
ELSE
    PRINT '<<< FAILED CREATING TABLE Dim_Food_Inspections_Results >>>'
go
```

```
/*
 * TABLE: Dim_Inspection_Type
 */
```

```
CREATE TABLE Dim_Inspection_Type(
    InspectionType_SK  int         NOT NULL,
    InspectionType    varchar(255)  NULL,
    DI_CreateDate     datetime     NULL,
    DI_WorkflowFileName  varchar(255)  NULL,
    CONSTRAINT PK1 PRIMARY KEY NONCLUSTERED (InspectionType_SK)
)
```

```
go
```

```
IF OBJECT_ID('Dim_Inspection_Type') IS NOT NULL
    PRINT '<<< CREATED TABLE Dim_Inspection_Type >>>'
ELSE
    PRINT '<<< FAILED CREATING TABLE Dim_Inspection_Type >>>'
go
```

```
/*
 * TABLE: Dim_Risk_Category
 */

CREATE TABLE Dim_Risk_Category(
    Risk_SK      int      NOT NULL,
    Risk         varchar(255)  NULL,
    DI_CreateDate  datetime   NULL,
    DI_WorkflowFlieName  varchar(255)  NULL,
    CONSTRAINT PK3 PRIMARY KEY NONCLUSTERED (Risk_SK)
)
```

```
go
```

```
IF OBJECT_ID('Dim_Risk_Category') IS NOT NULL
    PRINT '<<< CREATED TABLE Dim_Risk_Category >>>'
ELSE
    PRINT '<<< FAILED CREATING TABLE Dim_Risk_Category >>>'
go
```

```
/*
 * TABLE: Dim_Violation
 */


```

```
CREATE TABLE Dim_Violation(
    Violation_SK     int      NOT NULL,
    Violation_Code   varchar(255)  NULL,
    Violation_Description  varchar(255)  NULL,
    Violation_Comment  varchar(255)  NULL,
    version          varchar(255)  NULL,
    CONSTRAINT PK9 PRIMARY KEY NONCLUSTERED (Violation_SK)
)
```

```
go
```

```
IF OBJECT_ID('Dim_Violation') IS NOT NULL
    PRINT '<<< CREATED TABLE Dim_Violation >>>'
ELSE
    PRINT '<<< FAILED CREATING TABLE Dim_Violation >>>'
go
```

```
/*
 * TABLE: Fact_Inspection
 */


```

```
CREATE TABLE Fact_Inspection(
    Inspection_SK    int      NOT NULL,
    Facility_SK      int      NOT NULL,
    Risk_SK          int      NOT NULL,
    InspectionType_SK  int      NOT NULL,
    Result_SK        int      NOT NULL,
    BusinessLicense_SK  int      NOT NULL,
    InspectionScore  varchar(255)  NULL,
```

```
    Inspection_Date      date      NULL,
    Licence_Number       varchar(255)  NULL,
    DI_CreateDate        datetime   NULL,
    DI_WorkflowFileName  varchar(255)  NULL,
    Date_SK              char(10)   NOT NULL,
    CONSTRAINT PK2 PRIMARY KEY NONCLUSTERED (Inspection_SK)
)
```

```
go
```

```
IF OBJECT_ID('Fact_Inspection') IS NOT NULL
    PRINT '<<< CREATED TABLE Fact_Inspection >>>'
ELSE
    PRINT '<<< FAILED CREATING TABLE Fact_Inspection >>>'
go
```

```
/*
 * TABLE: Fact_Violation
 */
```

```
CREATE TABLE Fact_Violation(
    FactViolationSK      int      NOT NULL,
    Violation_SK         int      NOT NULL,
    Inspection_SK        int      NOT NULL,
    Violation_Points     varchar(255)  NULL,
    DI_CreateDate        date      NULL,
    DI_WorkflowFileName  varchar(255)  NULL,
    CONSTRAINT PK7 PRIMARY KEY NONCLUSTERED (FactViolationSK)
)
```

```
go
```

```
IF OBJECT_ID('Fact_Violation') IS NOT NULL
    PRINT '<<< CREATED TABLE Fact_Violation >>>'
ELSE
    PRINT '<<< FAILED CREATING TABLE Fact_Violation >>>'
go
```

```
/*
 * TABLE: Fact_Inspection
 */
```

```
ALTER TABLE Fact_Inspection ADD CONSTRAINT RefDim_Risk_Category2
    FOREIGN KEY (Risk_SK)
        REFERENCES Dim_Risk_Category(Risk_SK)
go
```

```
ALTER TABLE Fact_Inspection ADD CONSTRAINT RefDim_Business_License4
    FOREIGN KEY (BusinessLicense_SK)
        REFERENCES Dim_Business_License(BusinessLicense_SK)
go
```

```
ALTER TABLE Fact_Inspection ADD CONSTRAINT RefDim_Food_Inspections_Results6
    FOREIGN KEY (Result_SK)
```

```
REFERENCES Dim_Food_Inspections_Results(Result_SK)
go

ALTER TABLE Fact_Inspection ADD CONSTRAINT RefDim_Facility_Type7
    FOREIGN KEY (Facility_SK)
        REFERENCES Dim_Facility_Type(Facility_SK)
go

ALTER TABLE Fact_Inspection ADD CONSTRAINT RefDim_Date11
    FOREIGN KEY (Date_SK)
        REFERENCES Dim_Date(Date_SK)
go

ALTER TABLE Fact_Inspection ADD CONSTRAINT RefDim_Inspection_Type1
    FOREIGN KEY (InspectionType_SK)
        REFERENCES Dim_Inspection_Type(InspectionType_SK)
go

/*
 * TABLE: Fact_Violation
 */

ALTER TABLE Fact_Violation ADD CONSTRAINT RefFact_Inspection9
    FOREIGN KEY (Inspection_SK)
        REFERENCES Fact_Inspection(Inspection_SK)
go

ALTER TABLE Fact_Violation ADD CONSTRAINT RefDim_Violation10
    FOREIGN KEY (Violation_SK)
        REFERENCES Dim_Violation(Violation_SK)
go
```

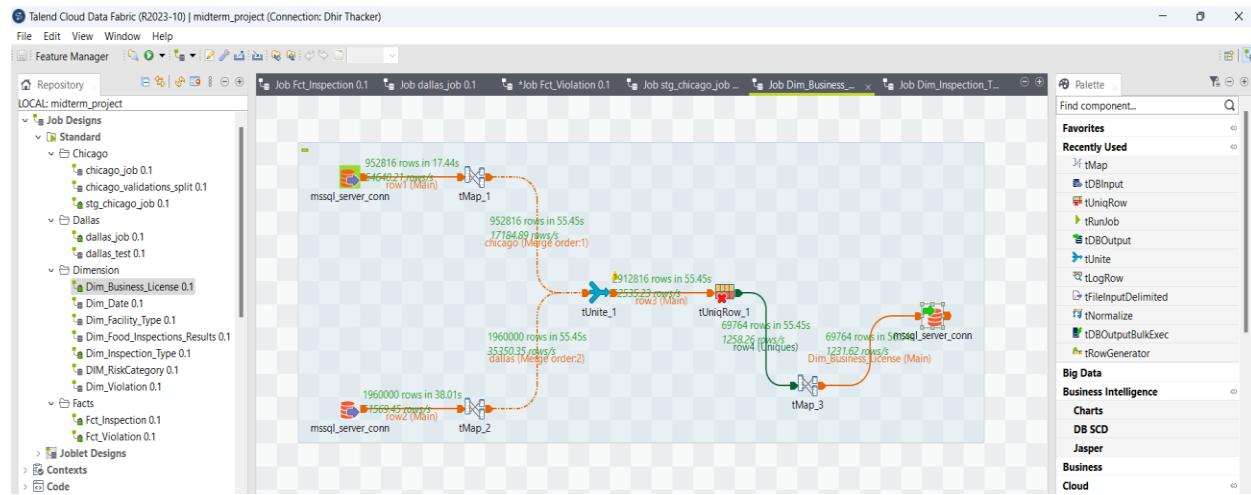
## DELIVERABLES – PART 3:

### STEP 1: LOAD DIMENSIONAL MODEL INTO INTEGRATION TABLES

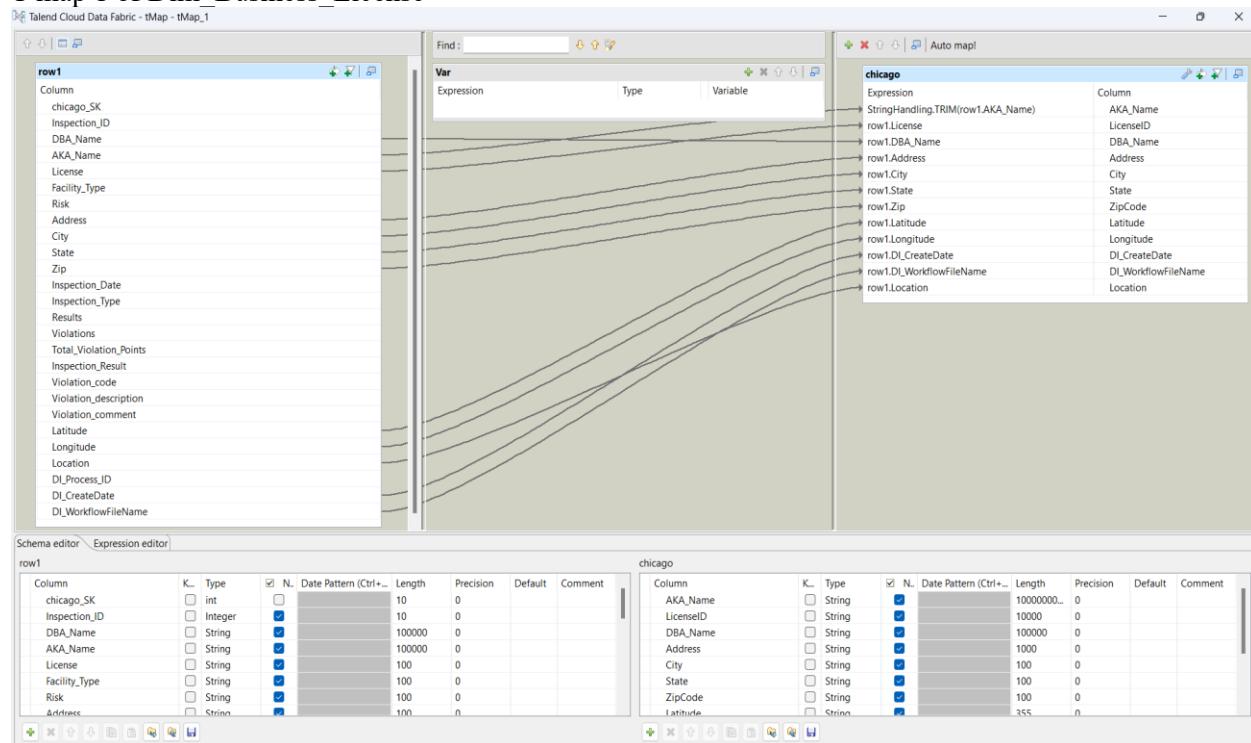
- Stage tables have been read from Talend and model was loaded.
- Dimensions and facts have been prefixed with dim\_ /fact\_.

## SCREENSHOTS OF DIMENSIONAL AND FACT TABLES AND RESPECTIVE SQL COUNT

### 1) Dim\_Business\_License



T-map 1 of Dim\_Business\_License



## T-map 2 of Dim\_Business\_License

Talend Cloud Data Fabric - tMap - tMap\_2

The screenshot shows the Talend Cloud Data Fabric interface for a tMap named tMap\_2. It consists of three main panels: a left panel for the source dataset 'row2', a middle panel for the transformation logic, and a right panel for the target dataset 'dallas'.

**Left Panel (row2):**

- Columns: Dallas\_SK, Restaurant\_Name, Inspection\_Type, Inspection\_Date, Inspection\_Score, Street\_Number, Street\_Name, Street\_Direction, Street\_Type, Street\_Unit, Street\_Address, Zip\_Code, Violation\_Code, Violation\_Description, Violation\_Comment, Violation\_Pt, Violations\_all, Violations\_Points, Inspection\_Result, Inspection\_Month, Inspection\_Year, Lat\_Long\_Location, DL\_CreateDate, DL\_WorkflowFileName.
- Schema editor: Shows column definitions with various data types (String, Date, Integer) and length specifications.

**Middle Panel (Transformation):**

- Var section: Expressions like `(row2.Lat_Long_Location.lastIndexOf(",") - 1)` and `(row2.Lat_Long_Location.lastIndexOf(",") + 1)` are mapped to variables Latitude and Longitude.
- Auto map! section: Shows the mapping from row2 columns to dallas columns.

**Right Panel (dallas):**

- Columns: AKA\_Name, LicenseID, DBA\_Name, Address, City, State, ZipCode, Latitude, Longitude, DL\_CreateDate, DL\_WorkflowFileName, Location.
- Schema editor: Shows column definitions with various data types (String, Date, Integer) and length specifications.

## T-Map 3 of Dim\_Business\_License

Talend Cloud Data Fabric - tMap - tMap\_3

The screenshot shows the Talend Cloud Data Fabric interface for a tMap named tMap\_3. It consists of three main panels: a left panel for the source dataset 'row4', a middle panel for the transformation logic, and a right panel for the target dataset 'Dim\_Business\_License'.

**Left Panel (row4):**

- Columns: AKA\_Name, LicenseID, DBA\_Name, Address, City, State, ZipCode, Latitude, Longitude, DL\_CreateDate, DL\_WorkflowFileName, Location.
- Schema editor: Shows column definitions with various data types (String, Date, Integer) and length specifications.

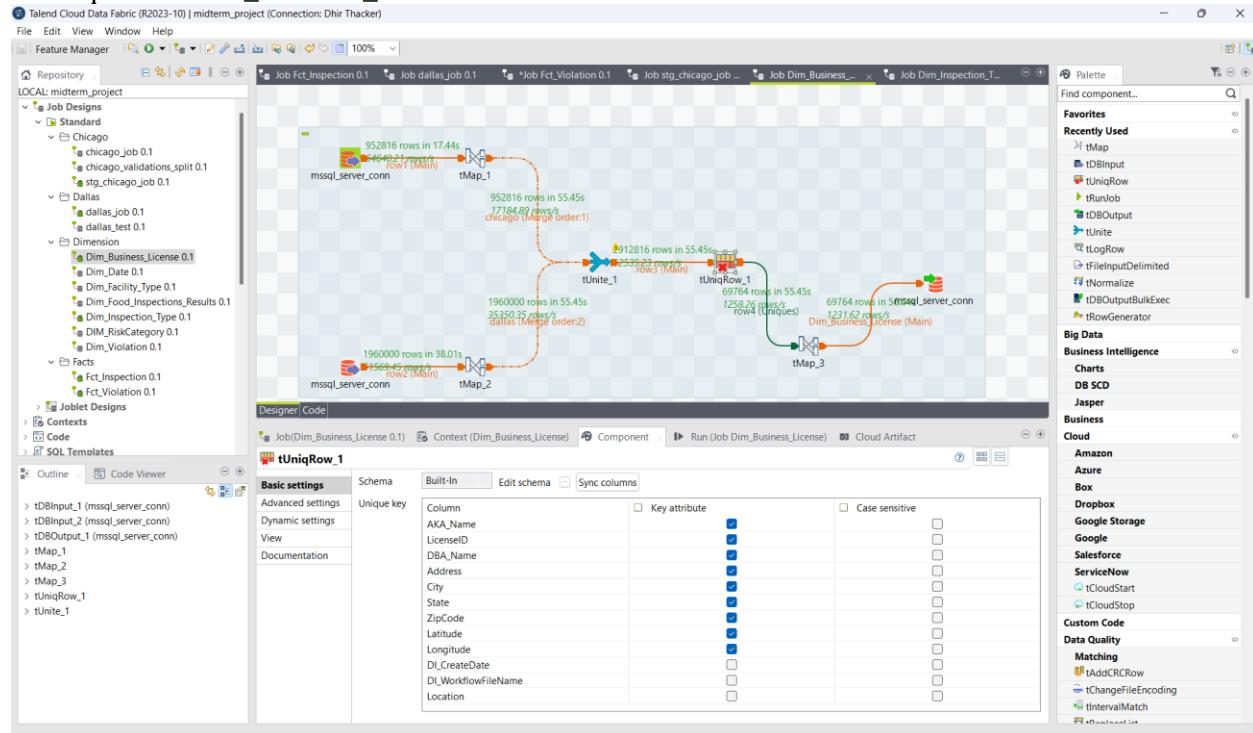
**Middle Panel (Transformation):**

- Var section: Expressions like `Numeric.sequence("s1",1,1)` and `row4.AKA_Name` are mapped to variables.
- Auto map! section: Shows the mapping from row4 columns to Dim\_Business\_License columns.

**Right Panel (Dim\_Business\_License):**

- Columns: BusinessLicense\_SK, AKA\_Name, LicenseID, DBA\_Name, Address, City, State, ZipCode.
- Schema editor: Shows column definitions with various data types (String, Date, Integer) and length specifications.

## T-UniqRow of Dim\_Business\_License



## SQL Output:

SQL Query Results:

```

73
74
75
76 SELECT TOP 100 * FROM stg_chicago;
77
78 select top 100 * from stg_data_dallas
80
81

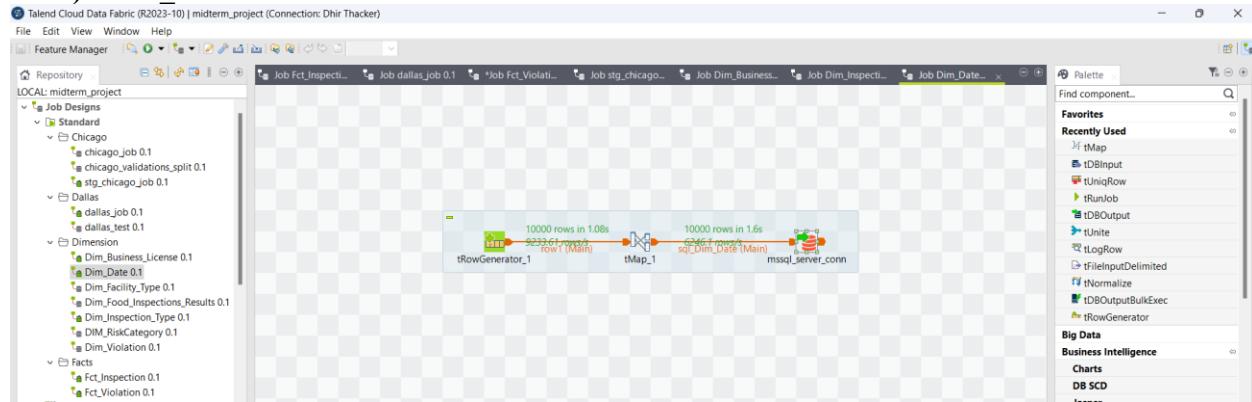
```

Results:

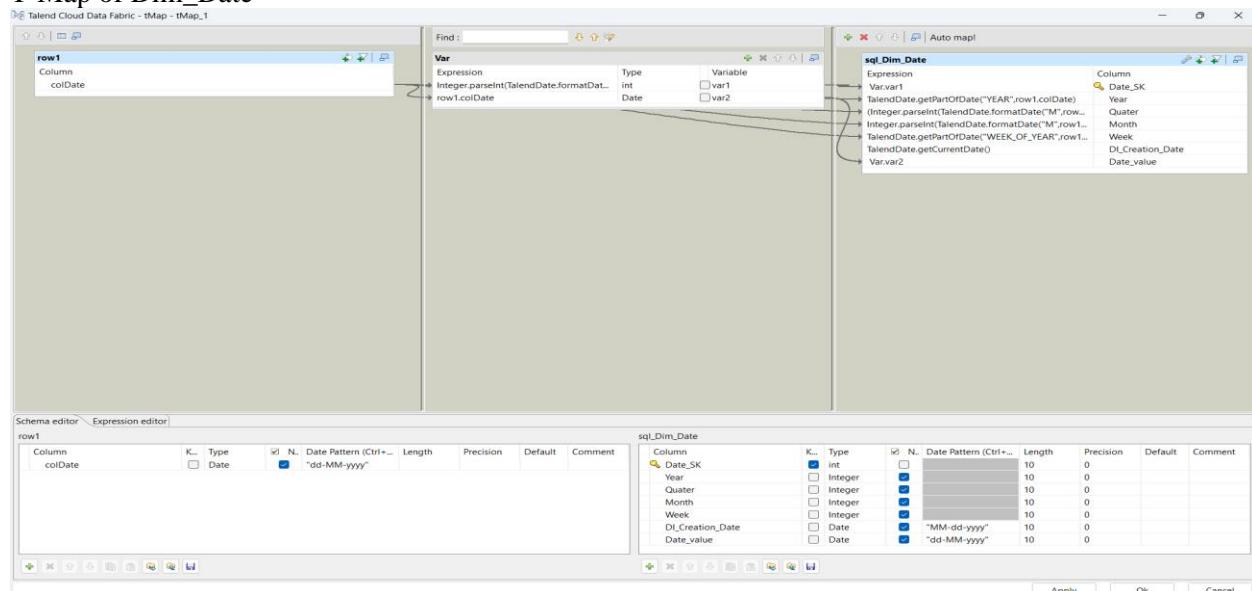
Dallas_SK	Restaurant_Name	Inspection_Type	Inspection_Date	Inspection_Score	Street_Number	Street_Name	Street_Direction	Street_Type	Street_Unit	Street_Address	Zip_Code	Violation_Code
1	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
2	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
3	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
4	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
5	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
6	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
7	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
8	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
9	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
10	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
11	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
12	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
13	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
14	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
15	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
16	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
17	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
18	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
19	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
20	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
21	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
22	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
23	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
24	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	
25	MICKLE CHICKEN	Routine	2019-10-30 00:00:00.000	100	3203	CAMP WISDOM	W	RD		3203 W CAMP WISDOM RD	75237	

Query executed successfully.

## 2) Dim Date



### T-Map of Dim\_Date



### SQL Output:

The screenshot shows the SSMS results grid with the following query results:

```

79 select top 100 * from stg_data_dallas
80
81 select top 100 * from Dim_Business_License
82
83 select top 100 * from dim_date
84
85 select top 100 * from Dim_Facility_Type
86
87 select top 100 * from Dim_Food_Inspections_Results
88
89 select top 100 * from Dim_Inspection_Type
90
91 select top 100 * from Dim_Risk_Category
92
93 select top 100 * from Dim_Violation
94
95 select top 100 * from Fact_Inspection
96
97 select top 100 * from Fact_Violation
98
99

```

	Date_SK	Year	Quarter	Month	Week	DL_Creation_Date	Date_value
1	20100102	2010	1	1	2024-03-14 11:38:30.090	2010-01-02 17:26:34.000	
2	20100103	2010	1	1	2024-03-14 11:38:30.090	2010-01-03 17:26:34.000	
3	20100104	2010	1	1	2024-03-14 11:38:30.090	2010-01-04 17:26:34.000	
4	20100105	2010	1	1	2024-03-14 11:38:30.090	2010-01-05 17:26:34.000	
5	20100106	2010	1	1	2024-03-14 11:38:30.090	2010-01-06 17:26:34.000	
6	20100107	2010	1	1	2024-03-14 11:38:30.090	2010-01-07 17:26:34.000	
7	20100108	2010	1	1	2024-03-14 11:38:30.090	2010-01-08 17:26:34.000	
8	20100109	2010	1	1	2024-03-14 11:38:30.090	2010-01-09 17:26:34.000	
9	20100110	2010	1	1	2024-03-14 11:38:30.090	2010-01-10 17:26:34.000	
10	20100111	2010	1	1	2024-03-14 11:38:30.090	2010-01-11 17:26:34.000	
11	20100112	2010	1	1	2024-03-14 11:38:30.090	2010-01-12 17:26:34.000	
12	20100113	2010	1	1	2024-03-14 11:38:30.090	2010-01-13 17:26:34.000	
13	20100114	2010	1	1	2024-03-14 11:38:30.090	2010-01-14 17:26:34.000	
14	20100115	2010	1	1	2024-03-14 11:38:30.090	2010-01-15 17:26:34.000	
15	20100116	2010	1	1	2024-03-14 11:38:30.090	2010-01-16 17:26:34.000	
16	20100117	2010	1	1	2024-03-14 11:38:30.090	2010-01-17 17:26:34.000	
17	20100118	2010	1	1	2024-03-14 11:38:30.090	2010-01-18 17:26:34.000	
18	20100119	2010	1	1	2024-03-14 11:38:30.090	2010-01-19 17:26:34.000	
19	20100120	2010	1	1	2024-03-14 11:38:30.090	2010-01-20 17:26:34.000	
20	20100121	2010	1	1	2024-03-14 11:38:30.090	2010-01-21 17:26:34.000	
21	20100122	2010	1	1	2024-03-14 11:38:30.090	2010-01-22 17:26:34.000	
22	20100123	2010	1	1	2024-03-14 11:38:30.090	2010-01-23 17:26:34.000	
23	20100124	2010	1	1	2024-03-14 11:38:30.090	2010-01-24 17:26:34.000	
24	20100125	2010	1	1	2024-03-14 11:38:30.107	2010-01-25 17:26:34.000	
25	20100126	2010	1	1	2024-03-14 11:38:30.107	2010-01-26 17:26:34.000	
26	20100127	2010	1	1	2024-03-14 11:38:30.107	2010-01-27 17:26:34.000	

Query executed successfully.

### 3) Dim\_Facility\_Type



T-Map 1 of Dim\_Facility\_Type

**T-Map 1 - Row Mappings:**

Row	Column	Target Column
row1	chicago_SK	row1.Facility_Type
row1	Inspection_ID	row1.DL_CreateDate
row1	DBA_Name	row1.DL_WorkflowFileName
row1	AKA_Name	
row1	License	
row1	Facility_Type	
row1	Risk	
row2	Address	
row2	City	
row2	State	
row2	Zip	
row2	Inspection_Date	
row2	Inspection_Type	
row2	Results	
row2	Violations	
row2	Total_Violation_Points	
row2	Inspection_Result	
row2	Violation_code	
row2	Violation_description	
row2	Violation_comment	
row2	Latitude	
row2	Longitude	
row2	Location	
row2	DL_Process_ID	
row2	DL_CreateDate	
row2	DL_WorkflowFileName	

**Schema Editor - Expression Editor:**

Row	Column	Type	Date Pattern	Length	Precision	Default	Comment
row1	chicago_SK	int		10	0		
row1	Inspection_ID	integer		10	0		
row1	DBA_Name	string		100	0		
row1	AKA_Name	string		100	0		
row1	License	string		100	0		
row1	Facility_Type	string		21474836...	0		
row1	Risk	string		100	0		
row2	Address	string		100	0		
row2	City	string		100	0		
row2	State	string		100	0		
row2	Zip	string		100	0		
row2	Inspection_Date	date	"dd-MM-yyyy"	23	3		
row2	Inspection_Type	string		100	0		
row2	Results	string		100	0		
row2	Violations	string		100	0		
row2	Total_Violation_Points	string		100	0		
row2	Inspection_Result	string		100	0		
row2	Violation_code	string		100	0		
row2	Violation_description	string		100	0		
row2	Violation_comment	string		100	0		
row2	Latitude	double		10	5		
row2	Longitude	double		10	5		
row2	Location	string		100	0		
row2	DL_Process_ID	string		100	0		
row2	DL_CreateDate	date	"dd-MM-yyyy"	23	3		
row2	DL_WorkflowFileName	string		100	0		

## T-Map 2 of Dim\_Facility\_Type

Talend Cloud Data Fabric - tMap - tMap\_3

The screenshot shows the Talend Cloud Data Fabric interface for a tMap named 'tMap\_3'. It consists of two main panels: 'row3' on the left and 'dallas' on the right.

**row3:**

- Columns: Dallas\_SK, Restaurant\_Name, Inspection\_Type, Inspection\_Date, Inspection\_Score, Street\_Number, Street\_Name, Street\_Direction, Street\_Type, Street\_Unit, Street\_Address, Zip\_Code, Violation\_Code, Violation\_Description, Violation\_Comment, Violation\_Pt, Violations\_all, Violations\_Points, Inspection\_Result, Inspection\_Month, Inspection\_Year, Lat\_Long\_Location, DI\_CreateDate, DI\_WorkflowFileName, Facility\_Type.
- Schema editor: Shows the column definitions and data types for row3.

**dallas:**

- Columns: FacilityType, DI\_CreateDate, DI\_WorkflowFileName.
- Auto map! panel: Shows the mapping from row3 columns to dallas columns.

**Mapping:**

- row3.Facility\_Type maps to dallas.FacilityType.
- row3.DI\_CreateDate maps to dallas.DI\_CreateDate.
- row3.DI\_WorkflowFileName maps to dallas.DI\_WorkflowFileName.

## T-Map 3 of Dim\_Facility\_Type

Talend Cloud Data Fabric - tMap - tMap\_2

The screenshot shows the Talend Cloud Data Fabric interface for a tMap named 'tMap\_2'. It consists of two main panels: 'row2' on the left and 'sql\_output' on the right.

**row2:**

- Columns: FacilityType, DI\_CreateDate, DI\_WorkflowFileName.
- Expression editor: Shows the expression 'Numeric.sequence("s1",1)' assigned to variable 'var1'.

**sql\_output:**

- Columns: Facility\_SK, FacilityType, DI\_CreateDate, DI\_WorkflowFileName.
- Auto map! panel: Shows the mapping from row2 columns to sql\_output columns.

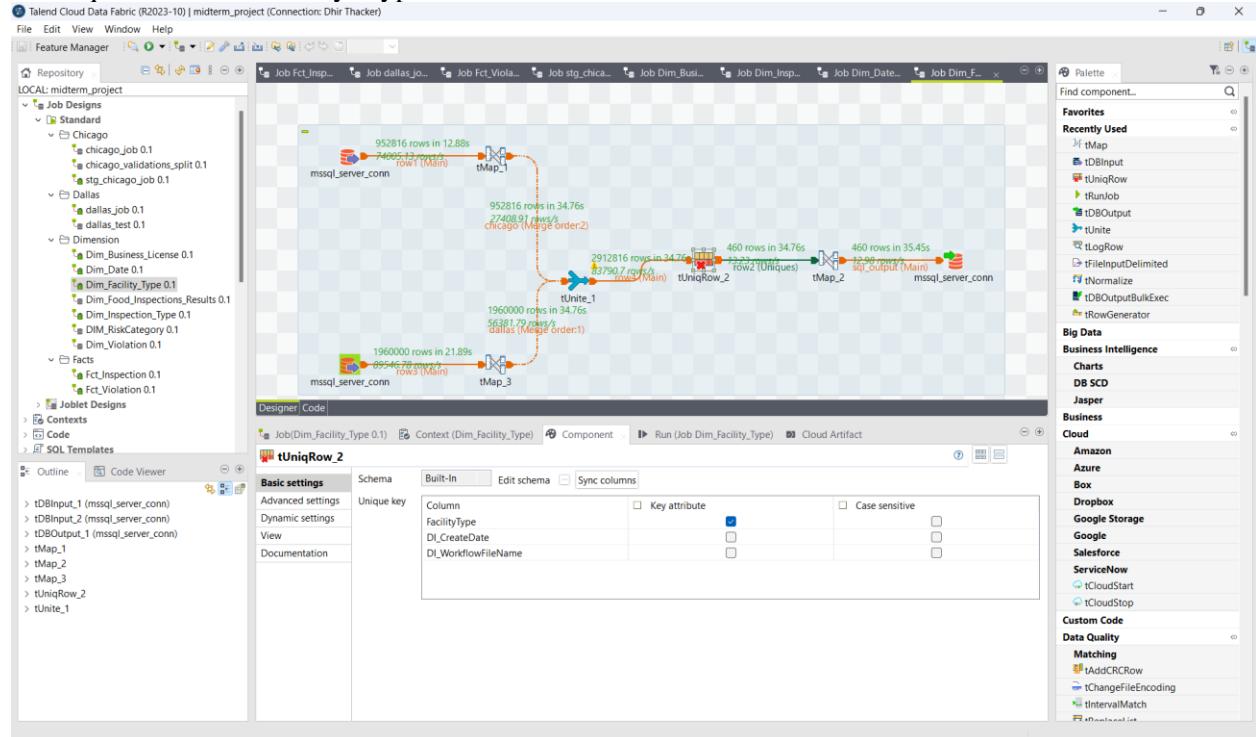
**Mapping:**

- row2.FacilityType maps to sql\_output.FacilityType.
- row2.DI\_CreateDate maps to sql\_output.DI\_CreateDate.
- row2.DI\_WorkflowFileName maps to sql\_output.DI\_WorkflowFileName.

**Schema editor:**

- row2:** Shows the column definitions and data types for row2.
- sql\_output:** Shows the column definitions and data types for sql\_output.

## T-UniqRow of Dim\_Facility\_Type



## SQL Output:

SQLQuery3.sql - DHIR.t(DHIR\dhirt (59))  
SQLQuery1.sql - DHIR...t (DHIR\dhirt (52))  
SQLQuery36.sql - not connected

```

78 select top 100 * from stg_data_dallas
79
80 select top 100 * from Dim_Business_License
81
82 select top 100 * from dim_Date
83
84 select top 100 * from Dim_Facility_Type
85
86 select top 100 * from Dim_Food_Inspections_Results
87
88 select top 100 * from Dim_Inspection_Type
89
90 select top 100 * from Dim_Risk_Category
91
92 select top 100 * from Dim_Violation
93
94 select top 100 * from Fact_Inspection
95
96 select top 100 * from Fact_Violation

```

80 %

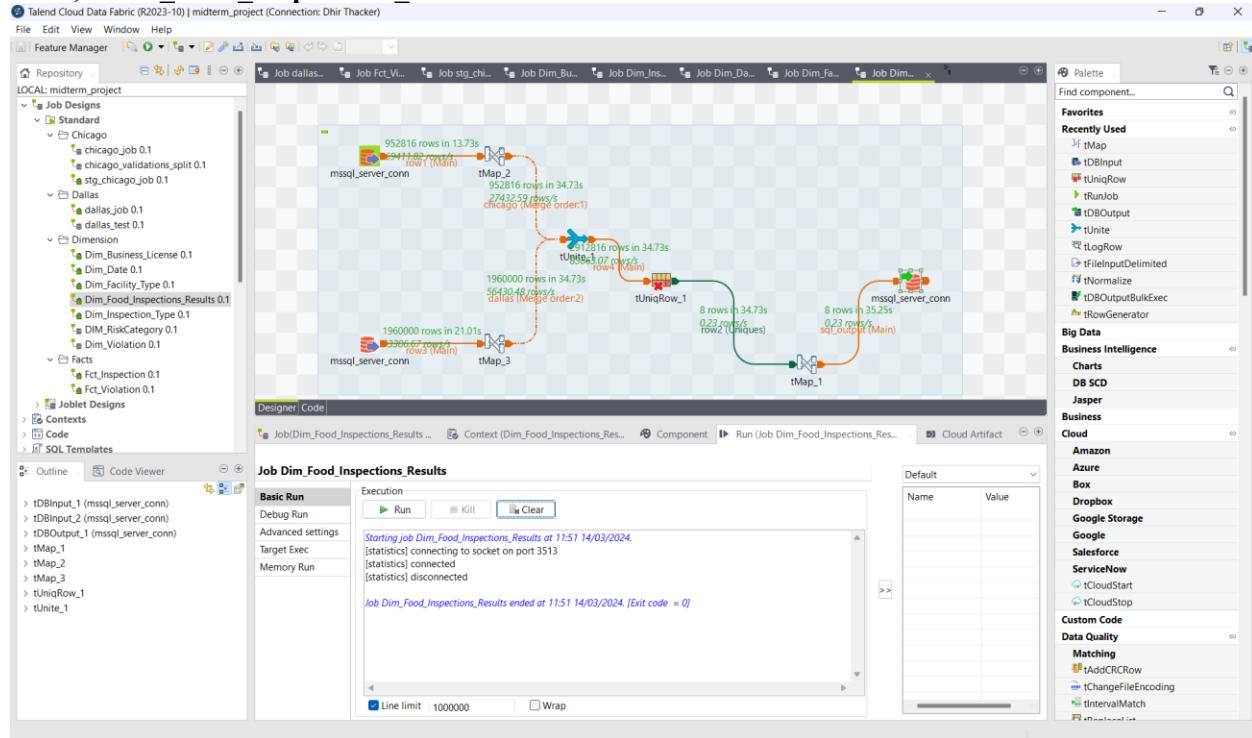
**Results**

Facility_SK	FacilityType	DL_CreateDate	DL_WorkflowFileName
1	Restaurant	2024-03-14 11:01:35.030	C:/Users/dhirt/Documents/NEU/Sem 2/DADABIL/midter...
2	School	2024-03-14 10:55:09.210	C:/Users/dhirt/Documents/NEU/Sem 2/DADABIL/midter...
3		2024-03-14 10:55:09.257	C:/Users/dhirt/Documents/NEU/Sem 2/DADABIL/midter...
4	Grocery Store	2024-03-14 10:55:09.257	C:/Users/dhirt/Documents/NEU/Sem 2/DADABIL/midter...
5	Catering	2024-03-14 10:55:09.273	C:/Users/dhirt/Documents/NEU/Sem 2/DADABIL/midter...
6	Children's Services Facility	2024-03-14 10:55:09.273	C:/Users/dhirt/Documents/NEU/Sem 2/DADABIL/midter...
7	SHELTER	2024-03-14 10:55:09.273	C:/Users/dhirt/Documents/NEU/Sem 2/DADABIL/midter...
8	Daycare Above and Under 2 Years	2024-03-14 10:55:09.273	C:/Users/dhirt/Documents/NEU/Sem 2/DADABIL/midter...
9	Golden Diner	2024-03-14 10:55:09.290	C:/Users/dhirt/Documents/NEU/Sem 2/DADABIL/midter...
10	Daycare (2 - 6 Years)	2024-03-14 10:55:09.297	C:/Users/dhirt/Documents/NEU/Sem 2/DADABIL/midter...
11	Daycare (Under 2 Years)	2024-03-14 10:55:09.307	C:/Users/dhirt/Documents/NEU/Sem 2/DADABIL/midter...
12	Pop-Up Establishment Host-Tier III	2024-03-14 10:55:09.320	C:/Users/dhirt/Documents/NEU/Sem 2/DADABIL/midter...
13	PASTRY SCHOOL	2024-03-14 10:55:09.353	C:/Users/dhirt/Documents/NEU/Sem 2/DADABIL/midter...
14	Nav Pier Kiosk	2024-03-14 10:55:09.367	C:/Users/dhirt/Documents/NEU/Sem 2/DADABIL/midter...
15	Bakery	2024-03-14 10:55:09.367	C:/Users/dhirt/Documents/NEU/Sem 2/DADABIL/midter...
16	PACKAGED HEALTH FOODS	2024-03-14 10:55:09.367	C:/Users/dhirt/Documents/NEU/Sem 2/DADABIL/midter...
17	Restaurant(protein shake bar)	2024-03-14 10:55:09.367	C:/Users/dhirt/Documents/NEU/Sem 2/DADABIL/midter...
18	TAVERN	2024-03-14 10:55:09.367	C:/Users/dhirt/Documents/NEU/Sem 2/DADABIL/midter...
19	BANQUET HALL	2024-03-14 10:55:09.383	C:/Users/dhirt/Documents/NEU/Sem 2/DADABIL/midter...
20	Shared Kitchen	2024-03-14 10:55:09.383	C:/Users/dhirt/Documents/NEU/Sem 2/DADABIL/midter...
21	MILK TEA	2024-03-14 10:55:09.383	C:/Users/dhirt/Documents/NEU/Sem 2/DADABIL/midter...
22	Mobile Food Preparer	2024-03-14 10:55:09.383	C:/Users/dhirt/Documents/NEU/Sem 2/DADABIL/midter...
23	Hospital	2024-03-14 10:55:09.383	C:/Users/dhirt/Documents/NEU/Sem 2/DADABIL/midter...
24	Long Term Care	2024-03-14 10:55:09.383	C:/Users/dhirt/Documents/NEU/Sem 2/DADABIL/midter...
25	LIVE POULTRY	2024-03-14 10:55:09.383	C:/Users/dhirt/Documents/NEU/Sem 2/DADABIL/midter...
26	GAS STATION/GROCERY	2024-03-14 10:55:09.400	C:/Users/dhirt/Documents/NEU/Sem 2/DADABIL/midter...

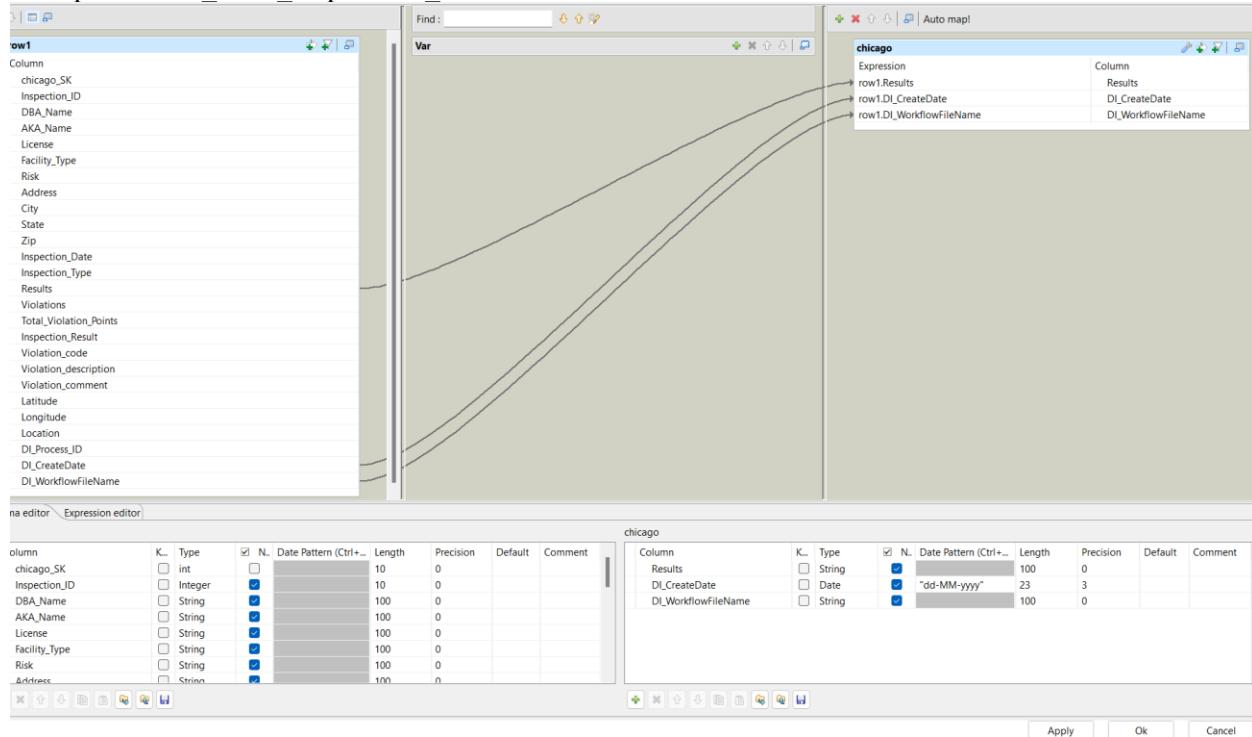
Query executed successfully.

Ln 84 Col 40 Ch 40 INS

#### 4) Dim Food Inspections Results



#### T-Map 1 of Dim\_Food\_Inspections\_Results



## T-Map 2 of Dim\_Food\_Inspections\_Results

Talend Cloud Data Fabric - tMap - tMap\_3

The screenshot shows the Talend T-Map interface for mapping dataset **row3** to **dallas**. The **row3** schema includes columns like Inspection\_SK, Restaurant\_Name, Inspection\_Type, Inspection\_Date, Inspection\_Score, Street\_Number, Street\_Name, Street\_Direction, Street\_Type, Street\_Unit, Street\_Address, Zip\_Code, Violation\_Code, Violation\_Description, Violation\_Comment, Violation\_Pt, Violations\_all, Violations\_Points, Inspection\_Result, Inspection\_Month, Inspection\_Year, Lat\_Long\_Location, DI\_CreateDate, and DI\_WorkflowFileName. The **dallas** schema includes columns Results, DI\_CreateDate, and DI\_WorkflowFileName. A mapping rule is defined: **row3.DI\_CreateDate** is mapped to **dallas.Results** with the expression `String.valueOf("0")`.

row3 Column	Type	N.	Date Pattern (Ctrl+Shift+Space)	Length	Precision	Default	Comment
Inspection_SK	int			10	0		
Restaurant_Name	String			100	0		
Inspection_Type	String			100	0		
Inspection_Date	Date		"dd-MM-yyyy"	23	3		
Inspection_Score	Integer			10	0		
Street_Number	Integer			10	0		
Street_Name	String			100	0		
Street_Direction	String			100	0		

dallas Column	Type	N.	Date Pattern (Ctrl+Shift+Space)	Length	Precision	Default	Comment
Results	String			100	0		
DI_CreateDate	Date		"dd-MM-yyyy"	23	3		
DI_WorkflowFileName	String			100	0		

## T-Map 3 of Dim\_Food\_Inspections\_Results

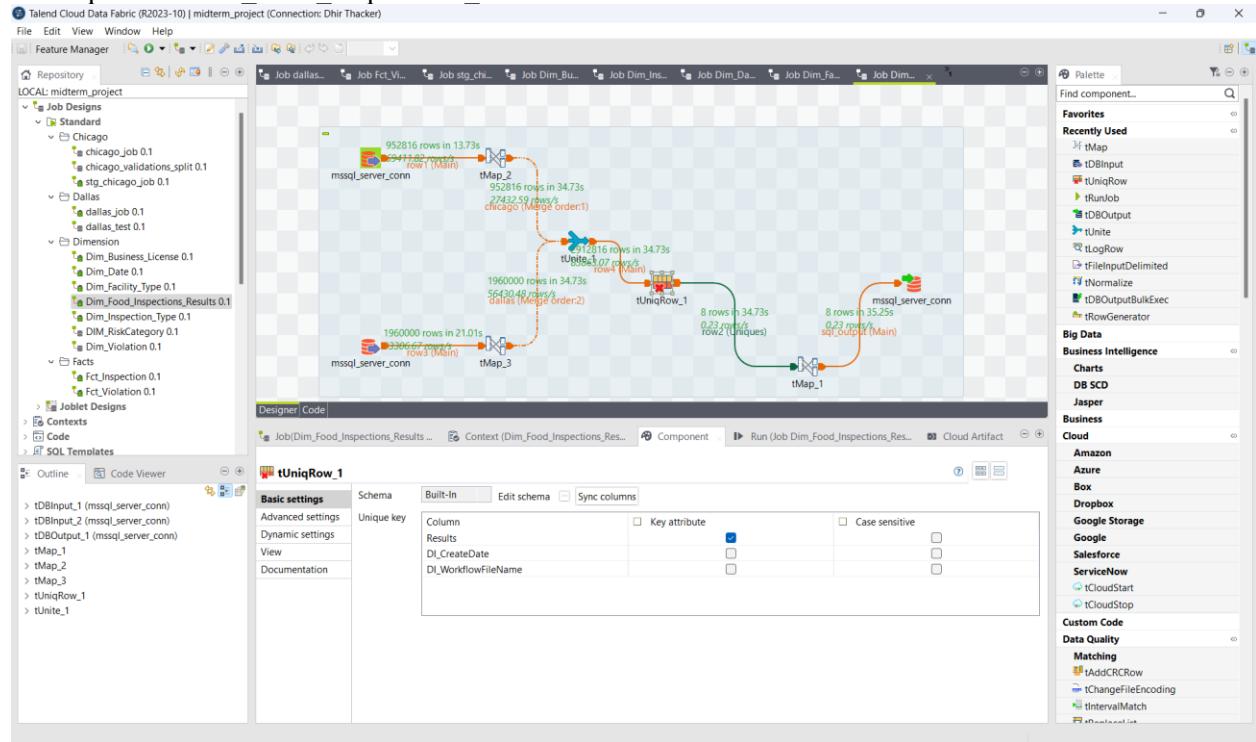
Talend Cloud Data Fabric - tMap - tMap\_1

The screenshot shows the Talend T-Map interface for mapping dataset **row2** to **sql\_output**. The **row2** schema includes columns Results, DI\_CreateDate, and DI\_WorkflowFileName. The **sql\_output** schema includes columns Result\_SK, Result, DI\_CreateDate, and DI\_WorkflowFileName. A mapping rule is defined: **row2.Results** is mapped to **sql\_output.Result** with the expression `Numeric.sequence("s1",1,1)`, and **row2.VarVar1** is mapped to **sql\_output.VarVar1**.

row2 Column	Type	N.	Date Pattern (Ctrl+Shift+Space)	Length	Precision	Default	Comment
Results	String			100	0		
DI_CreateDate	Date		"dd-MM-yyyy"	23	3		
DI_WorkflowFileName	String			100	0		

sql_output Column	Type	N.	Date Pattern (Ctrl+Shift+Space)	Length	Precision	Default	Comment
Result_SK	int			100	0		
Result	String			100	0		
DI_CreateDate	Date		"dd-MM-yyyy"	23	3		
DI_WorkflowFileName	String			100	0		

## T-UniqRow of Dim\_Food\_Inspections\_Results



## SQL Output:

SQL Server Management Studio (SSMS) window showing the results of the SQL queries:

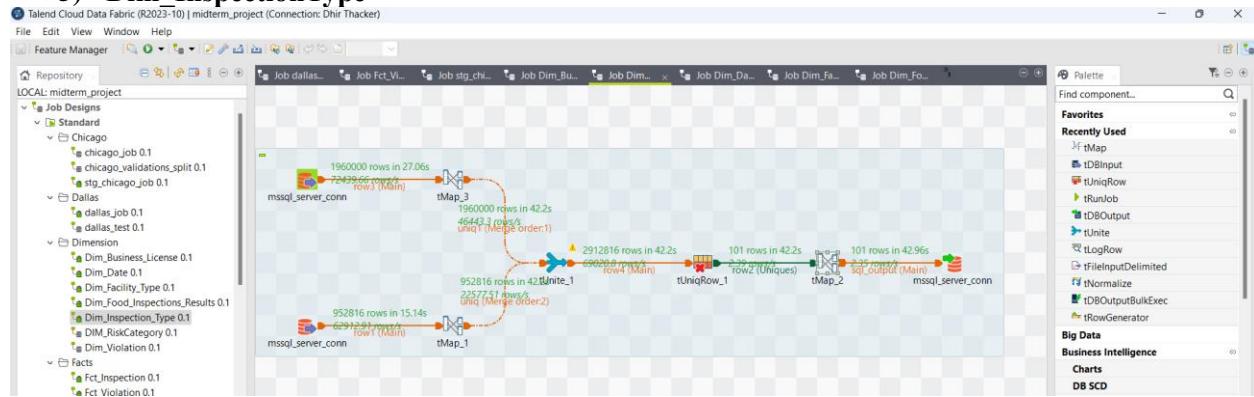
```

78 select top 100 * from stg_data_dallas
79
80 select top 100 * from Dim_Business_License
81
82 select top 100 * from dim_Data
83
84 select top 100 * from Dim_Facility_Type
85
86 select top 100 * from Dim_Food_Inspections_Results
87
88 select top 100 * from Dim_Inspection_Type
89
90 select top 100 * from Dim_Risk_Category
91
92 select top 100 * from Dim_Violation
93
94 select top 100 * from Fact_Inspection
95
96 select top 100 * from Fact_Violation
  
```

Results grid:

Result_SK	Result	DI_CreateDate	DI_WorkflowFileName
1	Pass	2024-03-14 10:55:09.210	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
2	Fail	2024-03-14 10:55:09.227	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
3	No Entry	2024-03-14 10:55:09.257	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
4	Not Ready	2024-03-14 10:55:09.257	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
5	Pass w/ Conditions	2024-03-14 10:55:09.257	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
6	Out of Business	2024-03-14 10:55:09.273	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
7	Business Not Located	2024-03-14 10:55:09.290	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
8	0	2024-03-14 11:01:35.030	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...

## 5) Dim\_InspectionType



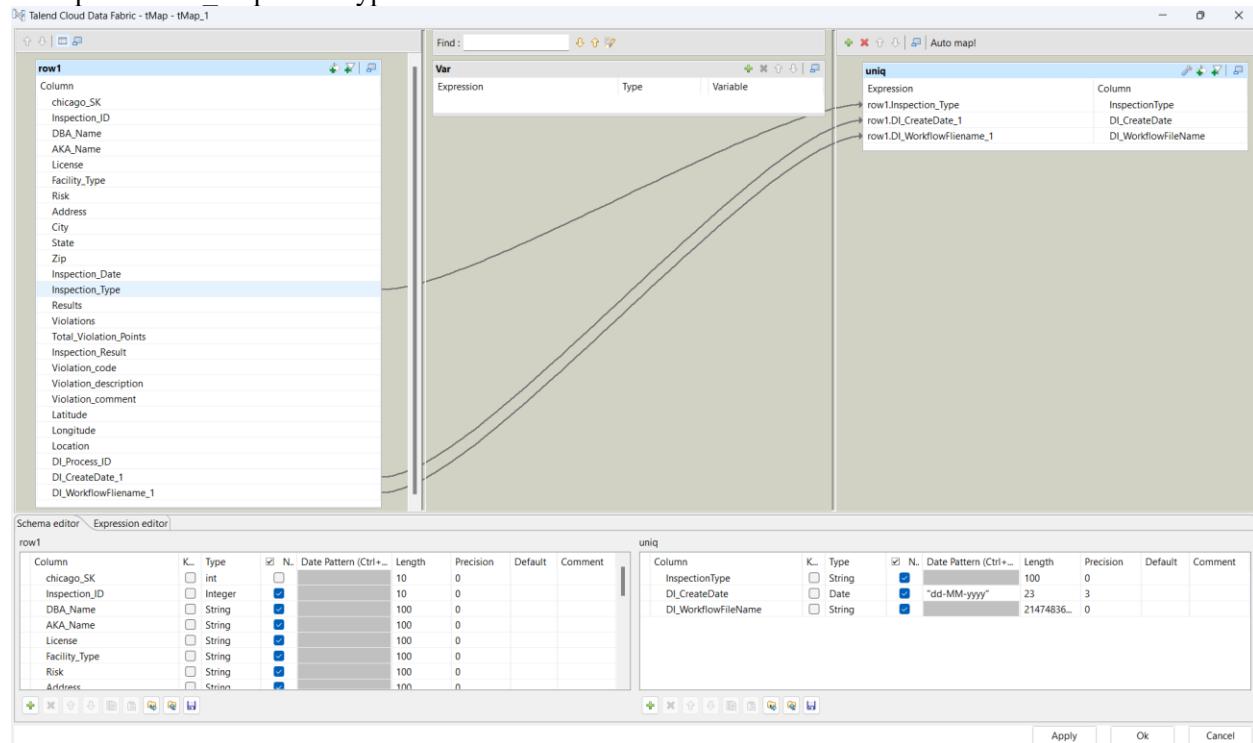
T-Map 1 of Dim\_InspectionType

The screenshot provides a detailed look at the configuration of T-Map 1. On the left, the Schema editor shows the structure of the source table 'row3' with columns such as Inspection\_SK, Restaurant\_Name, Inspection\_Type, etc. On the right, the Schema editor shows the target table 'uniq1' with columns like InspectionType, DL\_CreateDate, and DL\_WorkflowFileName. The middle section shows the mapping logic, with arrows indicating how specific columns from 'row3' map to specific columns in 'uniq1'. The expression editor at the bottom allows for the definition of these mappings.

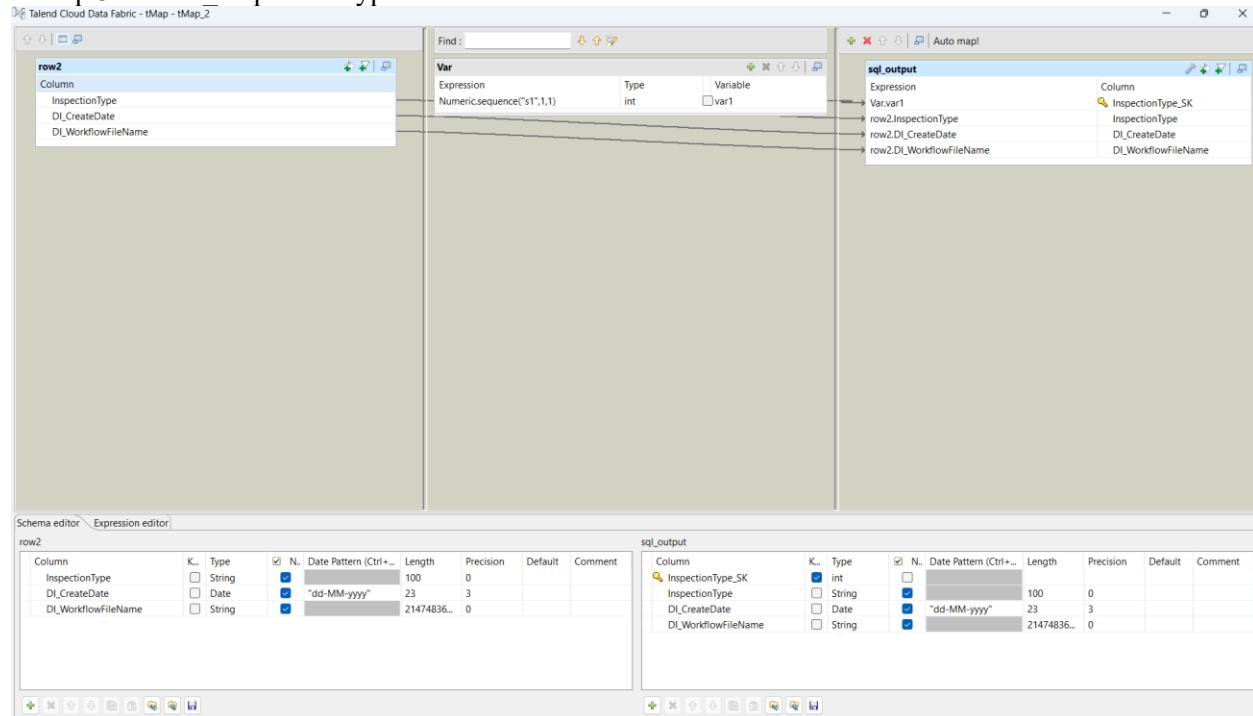
Column	K...	Type	N...	Date Pattern (Ctrl+...)	Length	Precision	Default	Comment
Inspection_SK	<input type="checkbox"/>	int	<input checked="" type="checkbox"/>		10	0		
Restaurant_Name	<input type="checkbox"/>	String	<input checked="" type="checkbox"/>		100	0		
Inspection_Type	<input type="checkbox"/>	String	<input checked="" type="checkbox"/>		100	0		
Inspection_Date	<input type="checkbox"/>	Date	<input checked="" type="checkbox"/>	"dd-MM-yyyy"	23	3		
Inspection_Score	<input type="checkbox"/>	Integer	<input checked="" type="checkbox"/>		10	0		
Street_Number	<input type="checkbox"/>	Integer	<input checked="" type="checkbox"/>		10	0		
Street_Name	<input type="checkbox"/>	String	<input checked="" type="checkbox"/>		100	0		
Street_Direction	<input type="checkbox"/>	String	<input checked="" type="checkbox"/>		100	0		

Column	K...	Type	N...	Date Pattern (Ctrl+...)	Length	Precision	Default	Comment
InspectionType	<input checked="" type="checkbox"/>	String	<input checked="" type="checkbox"/>		100	0		
DL_CreateDate	<input type="checkbox"/>	Date	<input checked="" type="checkbox"/>	"dd-MM-yyyy"	23	3		
DL_WorkflowFileName	<input type="checkbox"/>	String	<input checked="" type="checkbox"/>		21474836...	0		

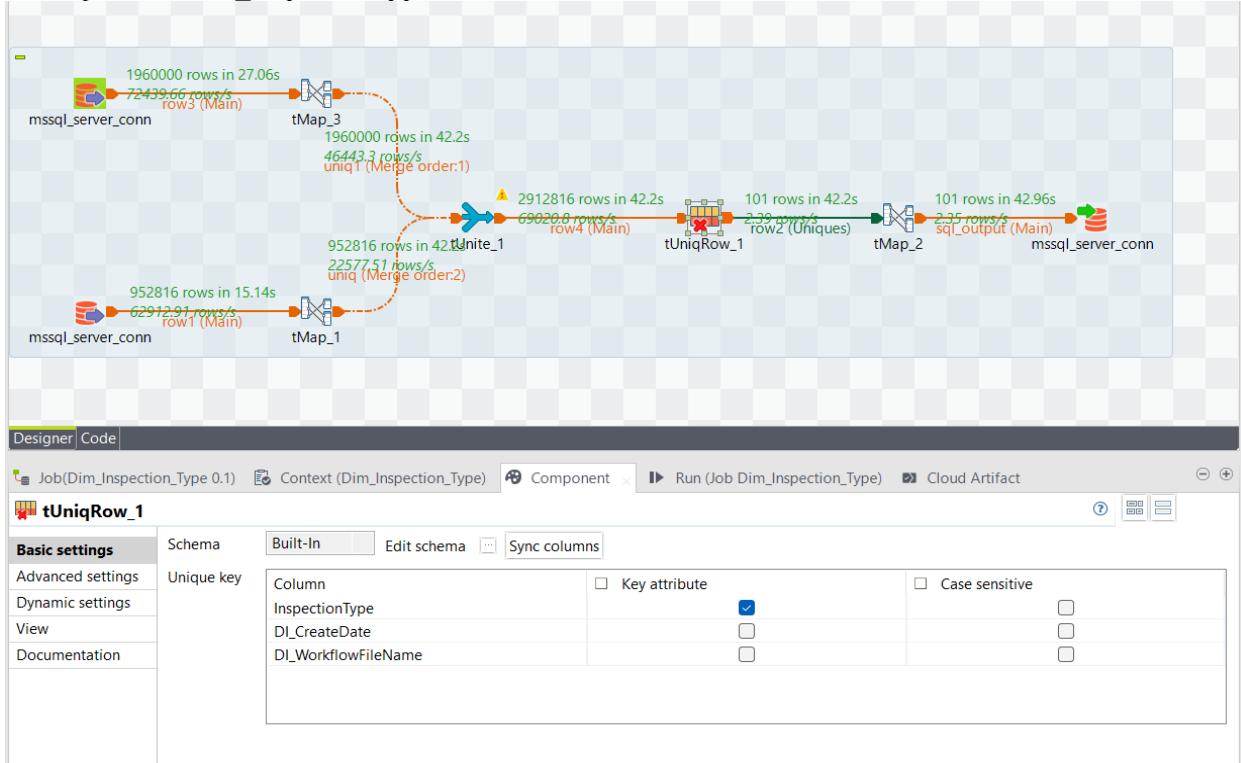
## T-Map 2 of Dim\_InspectionType



## T-Map 3 of Dim\_InspectionType



## T-UniqRow of Dim\_InspectionType



## SQL Output:

Object Explorer

```

1 select * from Dim_Food_Inspections_Results
2
3 select * from Dim_Date
4
5 select * from dim_Violation
6
7 select * from Dim_Facility_Type
8
9 select * from Dim_Risk_Category
10
11 select * from Dim_Business_License
12
13 select * from Dim_Inspection_Type

```

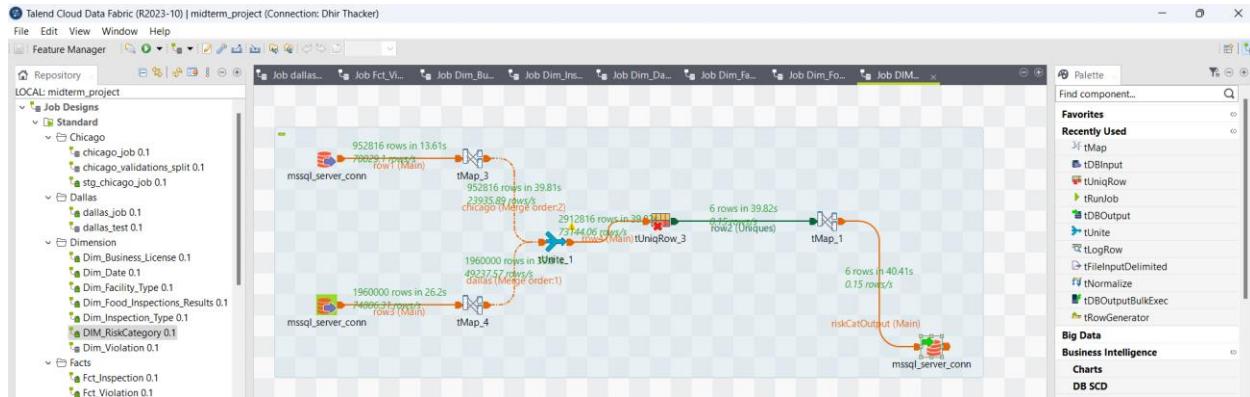
SQLQuery33.sql - DH... (71) Executing... SQLQuery31.sql - ...amg7370\_demo (85)\* SQLQuery29.sql - ..

Results

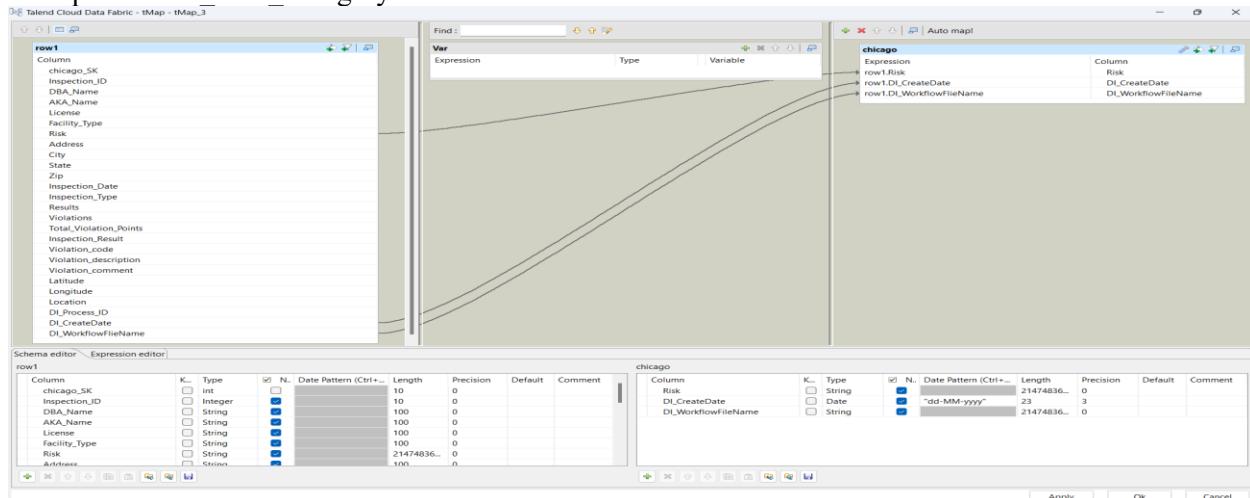
	InspectionType_SK	InspectionType	DI_CreateDate	DI_WorkflowFileName
1	551	Routine	2024-02-25 13:47:47.940	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
2	552	Routine	2024-02-25 13:47:47.940	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
3	553	Routine	2024-02-25 13:47:47.940	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
4	554	Routine	2024-02-25 13:47:47.940	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
5	555	Routine	2024-02-25 13:47:47.940	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
6	556	Routine	2024-02-25 13:47:47.940	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
7	557	Routine	2024-02-25 13:47:47.940	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
8	558	Routine	2024-02-25 13:47:47.940	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
9	559	Routine	2024-02-25 13:47:47.940	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
10	560	Routine	2024-02-25 13:47:47.940	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
11	561	Routine	2024-02-25 13:47:47.940	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
12	562	Routine	2024-02-25 13:47:47.940	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
13	563	Routine	2024-02-25 13:47:47.940	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
14	564	Routine	2024-02-25 13:47:47.940	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
15	565	Routine	2024-02-25 13:47:47.940	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
16	566	Routine	2024-02-25 13:47:47.940	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
17	567	Routine	2024-02-25 13:47:47.940	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
18	568	Routine	2024-02-25 13:47:47.940	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
19	569	Routine	2024-02-25 13:47:47.940	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
20	570	Routine	2024-02-25 13:47:47.940	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
21	571	Routine	2024-02-25 13:47:47.940	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
22	572	Routine	2024-02-25 13:47:47.940	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
23	573	Routine	2024-02-25 13:47:47.940	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
24	574	Routine	2024-02-25 13:47:47.940	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
25	575	Routine	2024-02-25 13:47:47.940	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...

Executing query

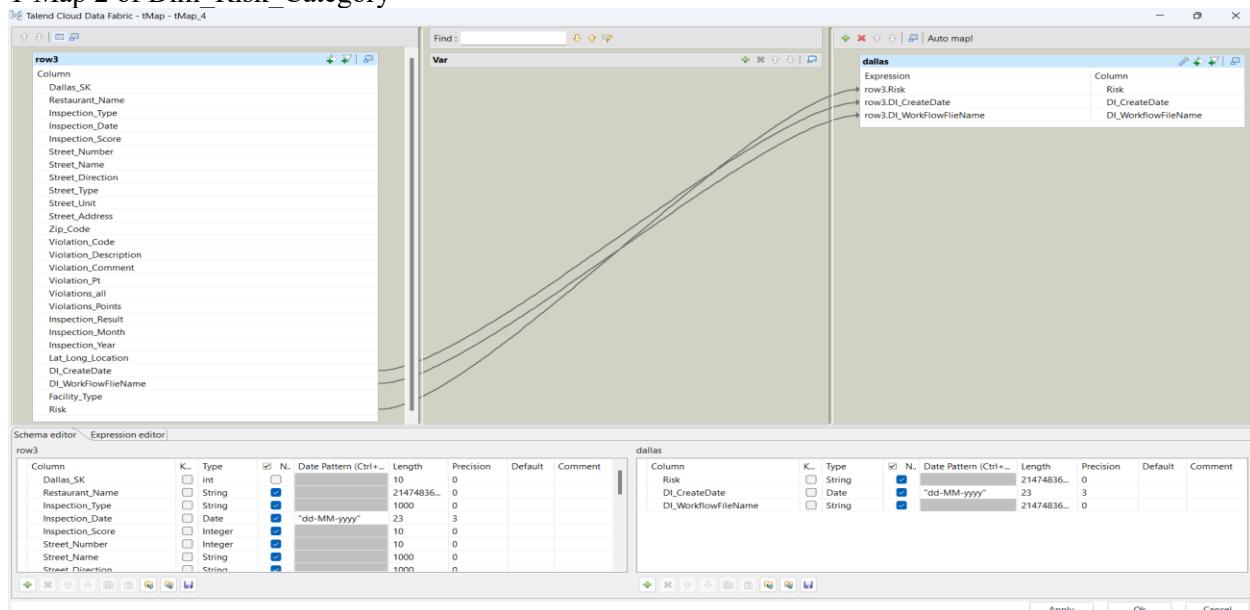
## 6) Dim\_Risk\_Category



T-Map 1 of Dim\_Risk\_Category



T-Map 2 of Dim\_Risk\_Category



## T-Map 3 of Dim\_Risk\_Category

**Row2**

Column	K_	Type	N.	Date Pattern (Ctrl+...	Length	Precision	Default	Comment
Risk	<input type="checkbox"/>	String	<input checked="" type="checkbox"/>	21474836...	0			
DL_CreateDate	<input type="checkbox"/>	Date	<input checked="" type="checkbox"/>	"dd-MM-yyyy"	23	3		
DL_WorkflowFileName	<input type="checkbox"/>	String	<input checked="" type="checkbox"/>	21474836...	0			

**riskCatOutput**

Column	K_	Type	N.	Date Pattern (Ctrl+...	Length	Precision	Default	Comment
Risk_SK	<input checked="" type="checkbox"/>	int	<input type="checkbox"/>		15	0		
Risk	<input checked="" type="checkbox"/>	String	<input type="checkbox"/>		23	3		
DL_CreateDate	<input type="checkbox"/>	Date	<input checked="" type="checkbox"/>	"dd-MM-yyyy"	23	3		
DL_WorkflowFileName	<input type="checkbox"/>	String	<input checked="" type="checkbox"/>	21474836...	0			

## T-UniqRow of Dim\_Risk\_Category

**tUniqRow\_3**

**Basic settings**

- Advanced settings
- Dynamic settings
- view
- Documentation

**Schema**

Column	Key attribute	Case sensitive
Risk	<input checked="" type="checkbox"/>	<input type="checkbox"/>
DL_CreateDate	<input type="checkbox"/>	<input type="checkbox"/>
DL_WorkflowFileName	<input type="checkbox"/>	<input type="checkbox"/>

## SQL Output:

SQLQuery3.sql - DHIR\dhirt (DHIR\dhirt (69))\*

```

78 select top 100 * from stg_data_dallas
79
80 select top 100 * from Dim_Business_License
81
82 select top 100 * from dim_Date
83
84 select top 100 * from Dim_Facility_Type
85
86 select top 100 * from Dim_Food_Inspections_Results
87
88 select top 100 * from Dim_Inspection_Type
89
90 select top 100 * from Dim_Risk_Category
91
92 select top 100 * from Dim_Violation
93
94 select top 100 * from Fact_Inspection
95
96 select top 100 * from Fact_Violation

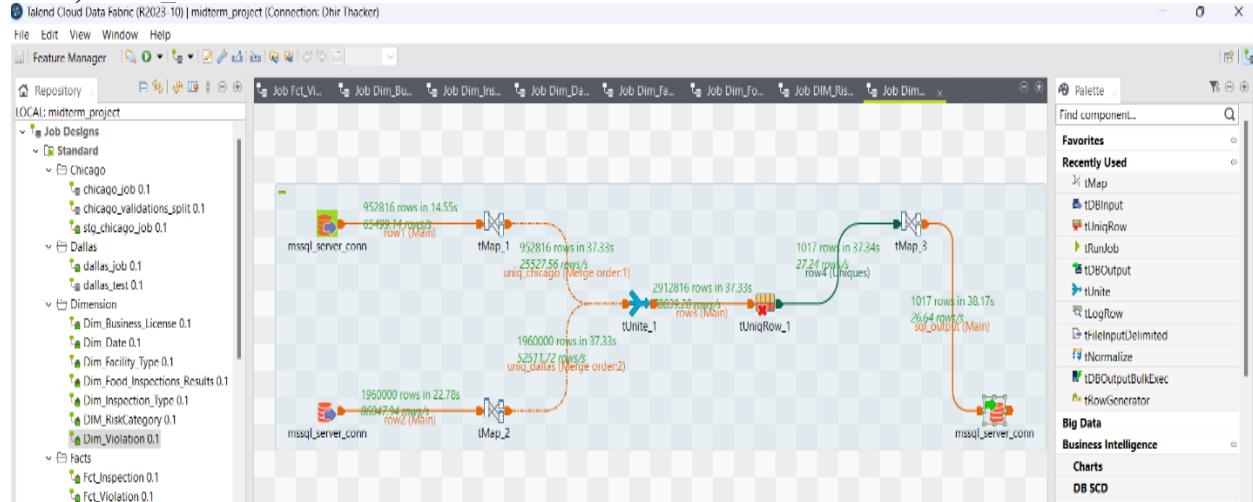
```

80 %

Results Messages

	Risk_SK	Risk	DI_CreateDate	DI_WorkflowFileName
1	1	0	2024-03-14 11:01:35.030	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
2	2	Risk 1 (High)	2024-03-14 10:55:09.210	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
3	3	Risk 2 (Medium)	2024-03-14 10:55:09.227	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
4	4	All	2024-03-14 10:55:09.257	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
5	5	Risk 3 (Low)	2024-03-14 10:55:09.273	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...
6	6		2024-03-14 10:55:09.320	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/midter...

## 7) Dim Violation



## T-Map 1 of Dim\_Violation

The screenshot shows the Talend Cloud Data Fabric interface for a tMap component named 'tMap\_1'. The left panel displays the schema for 'row1' with columns including 'chicago\_SK', 'Inspection\_ID', 'DBA\_Name', 'AKA\_Name', 'License', 'Facility\_Type', 'Risk', 'Address', 'City', 'State', 'Zip', 'Inspection\_Date', 'Inspection\_Type', 'Results', 'Violations', 'Total\_Violation\_Points', 'Inspection\_Result', 'Violation\_code', 'Violation\_description', 'Violation\_comment', 'Latitude', 'Longitude', 'Location', 'DL\_Process\_ID', 'DL\_CreateDate', and 'DL\_WorkflowFileName'. The right panel shows the schema for 'uniq\_chicago' with columns 'Violation\_Code', 'Violation\_Description', and 'Violation\_Comment'. The middle section is the mapping area where 'row1' is mapped to 'uniq\_chicago'. Below the mapping area are two schema editors: one for 'row1' and one for 'uniq\_chicago', both showing the same set of columns.

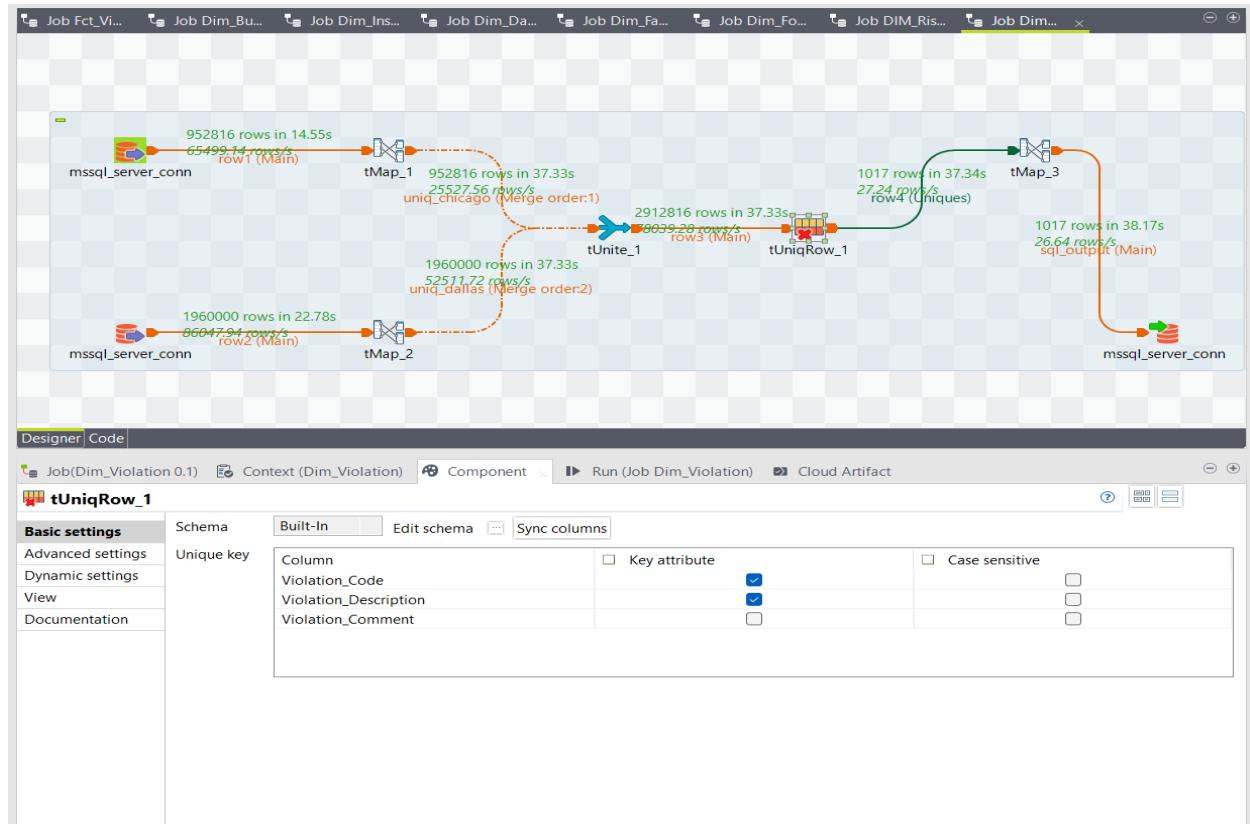
## T-Map 2 of Dim\_Violation

This screenshot is identical to the one above, showing the Talend Cloud Data Fabric interface for 'tMap\_1'. It displays the mapping between 'row1' and 'uniq\_chicago' datasets, with the same schemas and mapping structure as T-Map 1.

## T-Map 3 of Dim\_Violation

The screenshot shows the Talend Cloud Data Fabric interface for a tMap component named 'tMap\_3'. The top section displays two schema editors: 'row4' on the left and 'sql\_output' on the right. The 'row4' schema includes columns: Violation\_Code, Violation\_Description, and Violation\_Comment. The 'sql\_output' schema includes columns: Violation\_SK, Violation\_Code, and Violation\_Description. A variable 'var1' is defined with the expression 'Numeric.sequence("s1",1,1)' and is mapped to the 'Violation\_SK' column. The bottom section contains two 'Expression editor' panes. The left pane is for 'row4' and the right is for 'sql\_output'. Both panes show identical schema definitions with columns: Violation\_Code, Violation\_Description, and Violation\_Comment. The 'sql\_output' pane also includes a column 'Violation\_SK'. The bottom right corner of the interface has buttons for 'Apply', 'Ok', and 'Cancel'.

## T-UniqRow of Dim\_Violation



## SQL Output:

SQLQuery3.sql - DHIR...t (DHIR\dhirt (69))\* SQLQuery1.sql - DHIR...t (DHIR\dhirt (52))\* X SQLQuery36.sql - not connected

```
78 select top 100 * from stg_data_dallas
79
80 select top 100 * from Dim_Business_License
81
82 select top 100 * from dim_date
83
84 select top 100 * from Dim_Facility_Type
85
86 select top 100 * from Dim_Food_Inspections_Results
87
88 select top 100 * from Dim_Inspection_Type
89
90 select top 100 * from Dim_Risk_Category
91
92 select top 100 * from Dim_Violation
93
94 select top 100 * from Fact_Inspection
95
96 select top 100 * from Fact_Violation
```

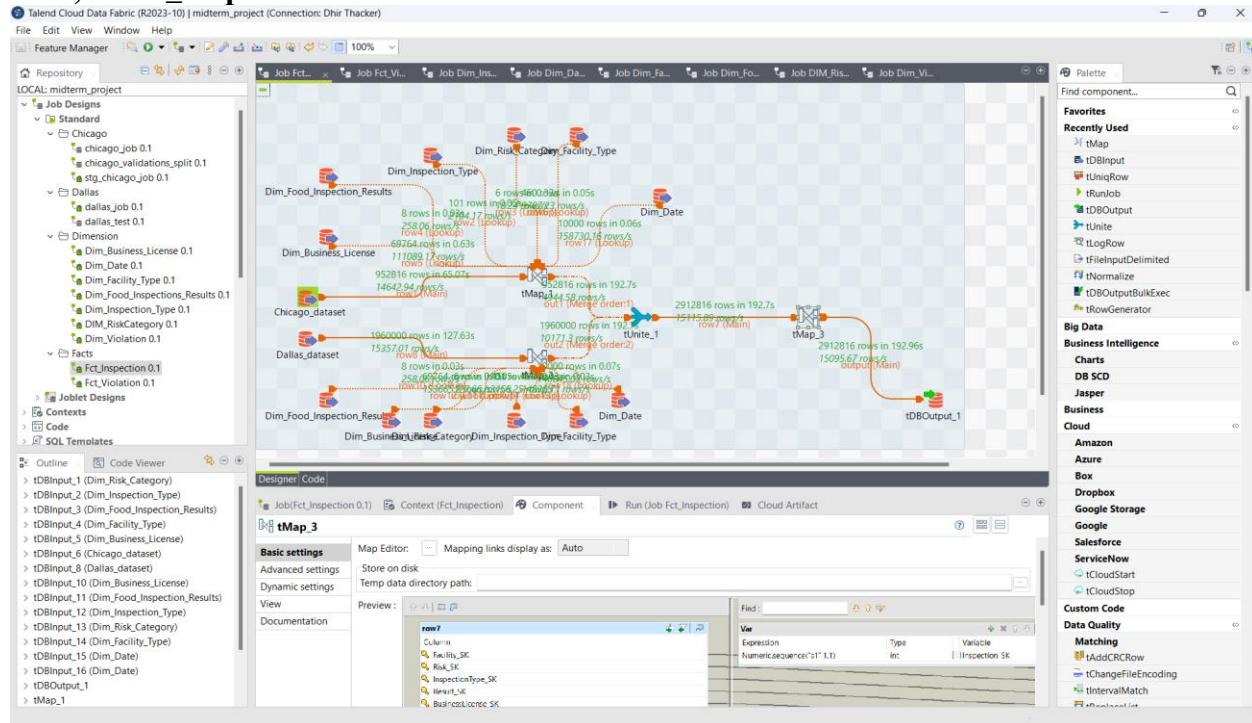
80 %

Results Messages

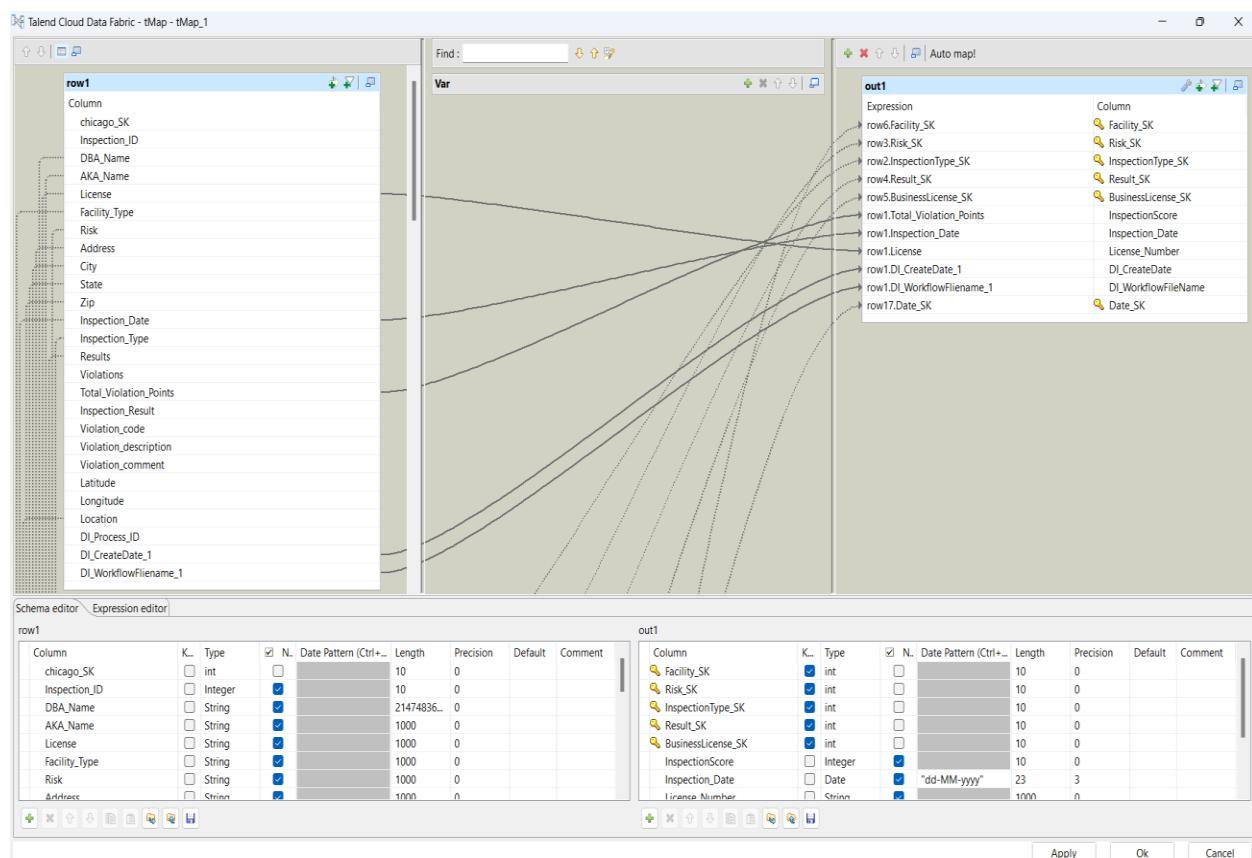
	Violation_SK	Violation_Code	Violation_Description
2	2	5	PROCEDURES FOR RESPONDING TO VOMITING AND DIARRH...
3	3	10	ADEQUATE HANDWASHING SINKS PROPERLY SUPPLIED AND ...
4	4	23	PROPER DATE MARKING AND DISPOSITION
5	5	35	APPROVED THAWING METHODS USED
6	6	37	FOOD PROPERLY LABELED: ORIGINAL CONTAINER
7	7	39	CONTAMINATION PREVENTED DURING FOOD PREPARATION, ...
8	8	41	WIPING CLOTHS: PROPERLY USED & STORED
9	9	47	FOOD & NON-FOOD CONTACT SURFACES CLEANABLE, PROPE...
10	10	49	NON-FOOD/FOOD CONTACT SURFACES CLEAN
11	11	52	SEWAGE & WASTE WATER PROPERLY DISPOSED
12	12	55	PHYSICAL FACILITIES INSTALLED, MAINTAINED & CLEAN
13	13	56	ADEQUATE VENTILATION & LIGHTING: DESIGNATED AREAS US...
14	14	36	THERMOMETERS PROVIDED & ACCURATE
15	15	38	INSECTS, RODENTS, & ANIMALS NOT PRESENT
16	16	53	TOILET FACILITIES: PROPERLY CONSTRUCTED, SUPPLIED, & C...
17	17	54	GARBAGE & REFUSE PROPERLY DISPOSED; FACILITIES MAINT...
18	18	58	ALLERGEN TRAINING AS REQUIRED
19	19	60	PREVIOUS CORE VIOLATION CORRECTED
20	20	44	UTENSILS, EQUIPMENT & LINENS: PROPERLY STORED, DRIE...
21	21	51	PLUMBING INSTALLED: PROPER BACKFLOW DEVICES
22	22	40	PERSONAL CLEANLINESS
23	23	1	PERSON IN CHARGE PRESENT, DEMONSTRATES KNOWLEDG...
24	24	2	CITY OF CHICAGO FOOD SERVICE SANITATION CERTIFICATE
25	25	48	WAREWASHING FACILITIES: INSTALLED, MAINTAINED & USED; ...
26	26	57	ALL FOOD EMPLOYEES HAVE FOOD HANDLER TRAINING
27	27	3	MANAGEMENT, FOOD EMPLOYEE AND CONDITIONAL EMPLOY...

✓ Query executed successfully. | DHI

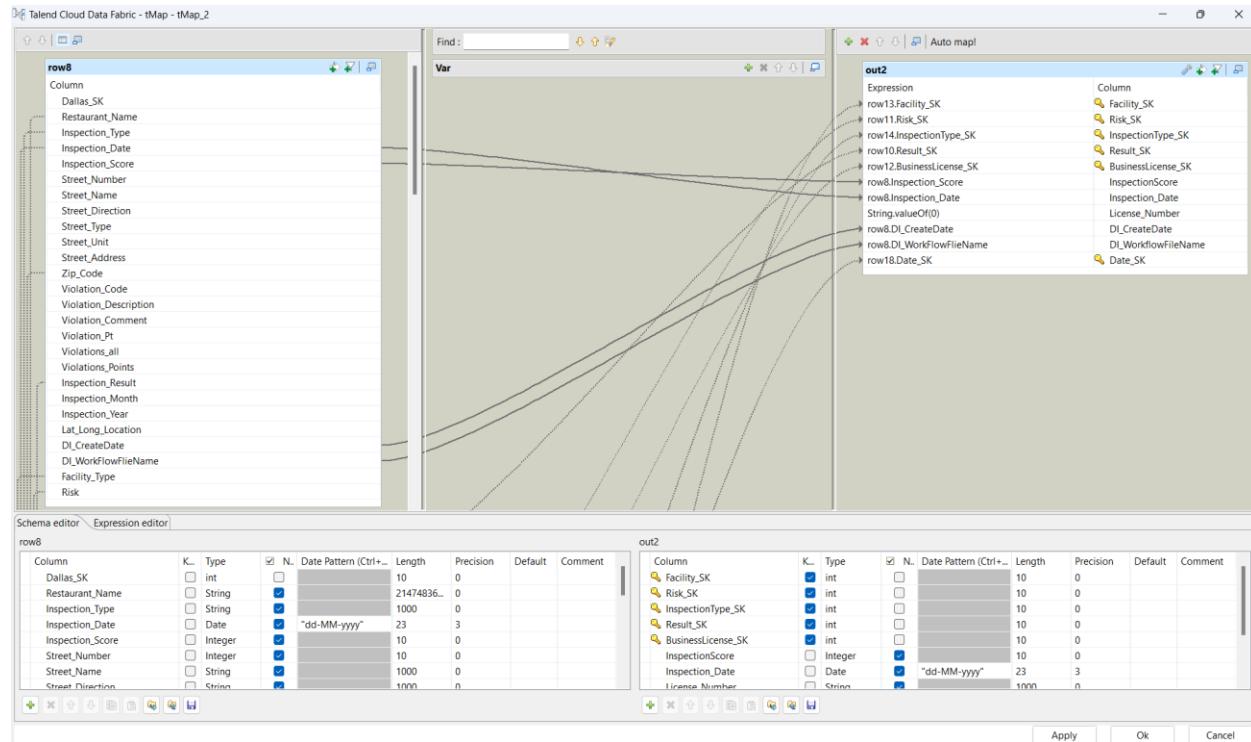
## 8) Fact\_Inspection



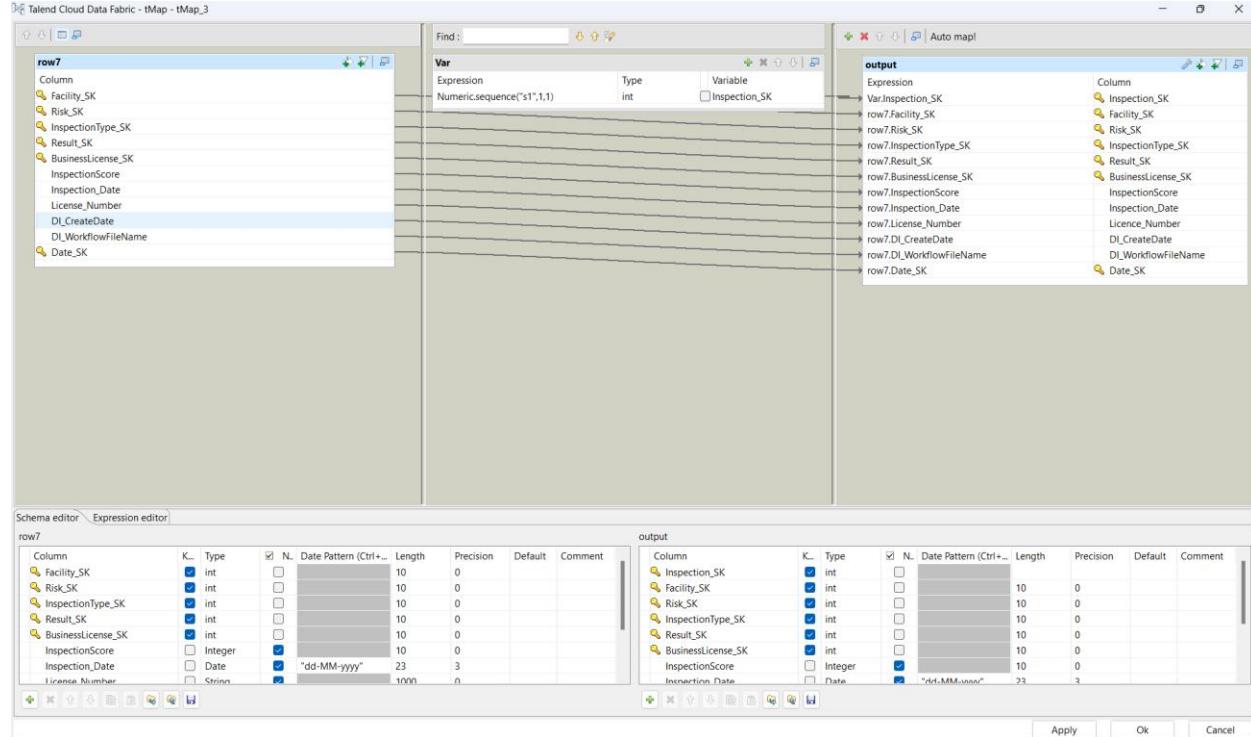
T-Map 1 of Fact\_Inspection



## T-Map 2 of Fact\_Inspection



## T-Map 3 of Fact\_Inspection



## SQL Output:

```

88 select top 100 * from Dim_Inspection_Type
89
90 select top 100 * from Dim_Risk_Category
91
92 select top 100 * from Dim_Violation
93
94 select top 100 * from Fact_Inspection
95
96 select top 100 * from Fact_Violation

```

80 %

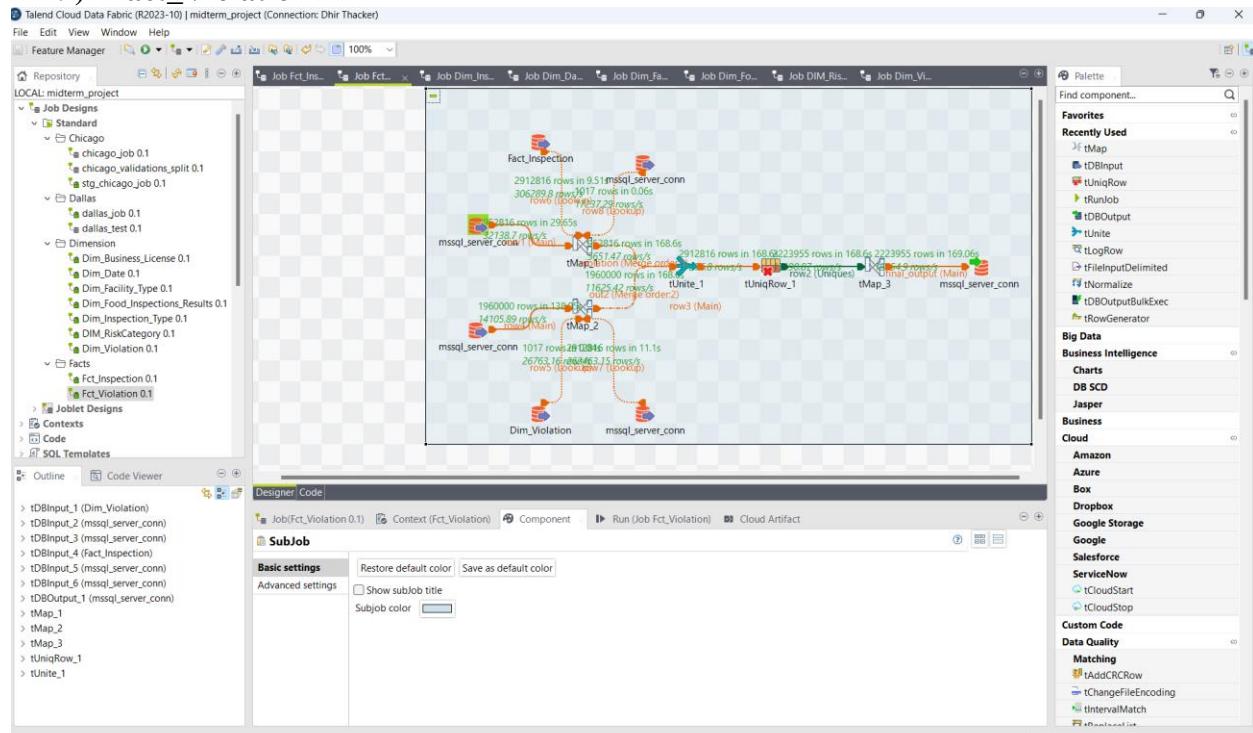
Result Messages

	Inspection_SK	Facility_SK	Risk_SK	InspectionType_SK	Result_SK	BusinessLicense_SK	InspectionScore	Inspection_Date	Licence_Number	DI_CreateDate	DI_WorkflowFileName
1	1	2	2	4	1	1	30	2024-02-20 00:00:00.000	26891	2024-03-14 10:55:09.210	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/mi
2	2	1	3	5	1	2	20	2024-02-16 00:00:00.000	2952387	2024-03-14 10:55:09.227	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/mi
3	3	1	2	4	2	3	100	2024-02-16 00:00:00.000	2423715	2024-03-14 10:55:09.227	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/mi
4	4	1	2	4	2	3	100	2024-02-16 00:00:00.000	2423715	2024-03-14 10:55:09.227	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/mi
5	5	1	2	4	2	3	100	2024-02-16 00:00:00.000	2423715	2024-03-14 10:55:09.227	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/mi
6	6	1	2	4	2	3	100	2024-02-16 00:00:00.000	2423715	2024-03-14 10:55:09.227	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/mi
7	7	1	2	4	2	3	100	2024-02-16 00:00:00.000	2423715	2024-03-14 10:55:09.227	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/mi
8	8	1	2	4	2	3	100	2024-02-16 00:00:00.000	2423715	2024-03-14 10:55:09.227	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/mi
9	9	1	2	4	2	3	100	2024-02-16 00:00:00.000	2423715	2024-03-14 10:55:09.227	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/mi
10	10	1	2	4	2	3	100	2024-02-16 00:00:00.000	2423715	2024-03-14 10:55:09.227	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/mi
11	11	1	2	4	2	3	100	2024-02-16 00:00:00.000	2423715	2024-03-14 10:55:09.227	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/mi
12	12	1	2	4	2	3	100	2024-02-16 00:00:00.000	2423715	2024-03-14 10:55:09.227	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/mi
13	13	1	2	4	2	3	100	2024-02-16 00:00:00.000	2423715	2024-03-14 10:55:09.227	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/mi
14	14	1	2	4	2	3	100	2024-02-16 00:00:00.000	2423715	2024-03-14 10:55:09.227	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/mi
15	15	1	2	4	2	3	100	2024-02-16 00:00:00.000	2423715	2024-03-14 10:55:09.227	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/mi
16	16	1	2	4	2	3	100	2024-02-16 00:00:00.000	2423715	2024-03-14 10:55:09.227	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/mi
17	17	1	2	4	2	3	100	2024-02-16 00:00:00.000	2423715	2024-03-14 10:55:09.227	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/mi
18	18	1	2	4	2	3	100	2024-02-16 00:00:00.000	2423715	2024-03-14 10:55:09.227	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/mi
19	19	1	2	4	2	3	100	2024-02-16 00:00:00.000	2423715	2024-03-14 10:55:09.227	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/mi
20	20	1	2	2	2	4	100	2024-02-16 00:00:00.000	2405266	2024-03-14 10:55:09.227	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/mi
21	21	1	2	2	2	4	100	2024-02-16 00:00:00.000	2405266	2024-03-14 10:55:09.243	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/mi
22	22	1	2	2	2	4	100	2024-02-16 00:00:00.000	2405266	2024-03-14 10:55:09.243	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/mi
23	23	1	2	2	2	4	100	2024-02-16 00:00:00.000	2405266	2024-03-14 10:55:09.243	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/mi
24	24	1	2	2	2	4	100	2024-02-16 00:00:00.000	2405266	2024-03-14 10:55:09.243	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/mi
25	25	1	2	2	2	4	100	2024-02-16 00:00:00.000	2405266	2024-03-14 10:55:09.243	C:/Users/dhirt/Documents/NEU/Sem 2/DADABl/mi

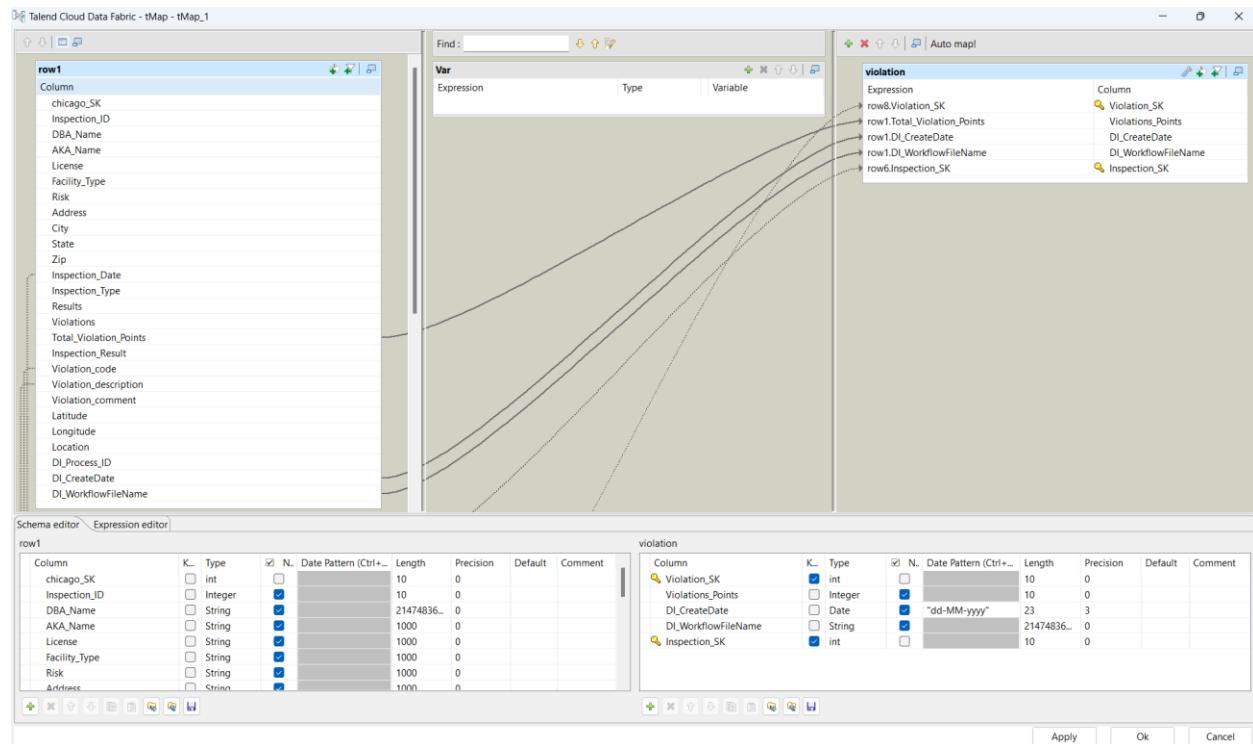
Query executed successfully.

DHIR (16.0 RTM) | DHIR/dhir (52) | midterm\_project | 00:00:00 | 100 rows

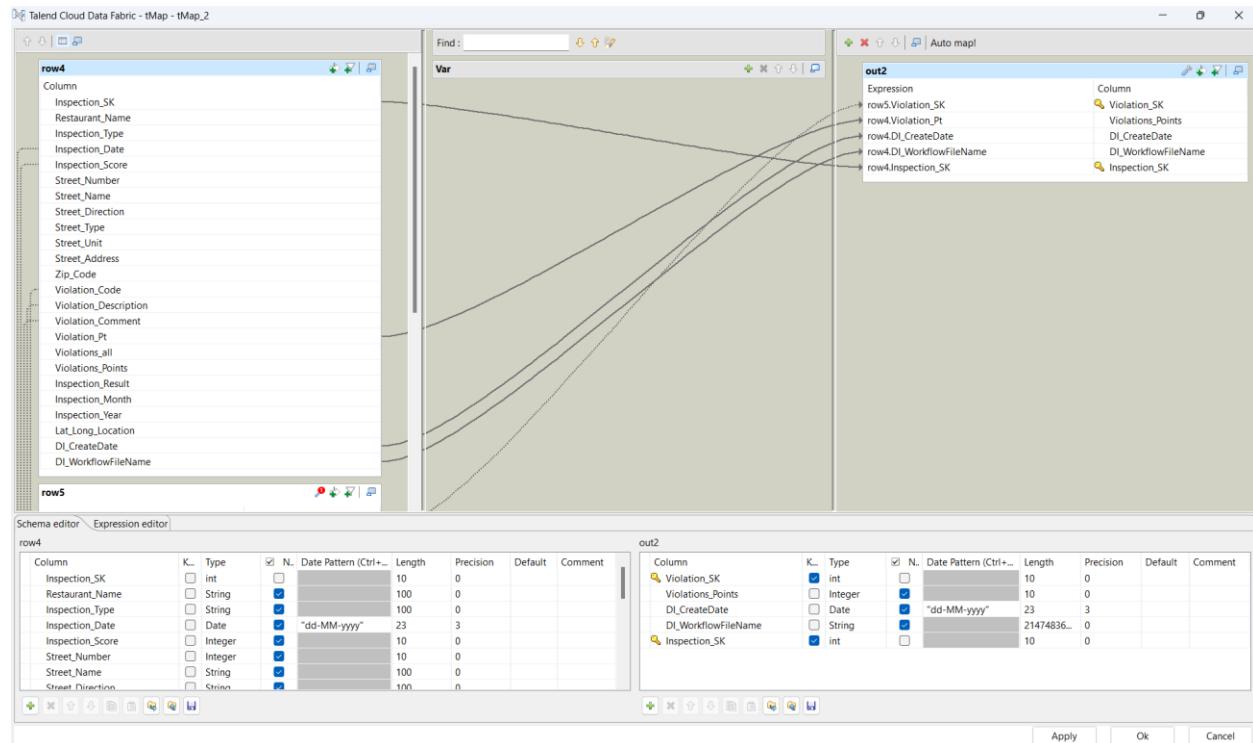
## 9) Fact\_Violation



## T-Map 1 of Fact\_Violation



## T-Map 2 of Fact\_Violation



## T-Map 3 of Fact\_Violation

Talend Cloud Data Fabric - tMap - tMap\_3

**row2**

Column	Type	Date Pattern (Ctrl+Shift+D)	Length	Precision	Default	Comment
Violation_SK	int		10	0		
Violations_Points	integer		10	0		
DL_CreateDate	Date		23	3		
DL_WorkflowFileName	String	"dd-MM-yyyy"	21474836...	0		
Inspection_SK	int		10	0		

**Var**

Expression	Type	Variable
Numeric.sequence("s1",1,1)	int	var1

**final\_output**

Column	Type	Date Pattern (Ctrl+Shift+D)	Length	Precision	Default	Comment
FactViolationSK	int		10	0		
Violation_SK	int		10	0		
Violations_Points	integer		10	0		
row2_DL_CreateDate	Date	"dd-MM-yyyy"	23	3		
row2_DL_WorkflowFileName	String		21474836...	0		
row2_Inspection_SK	int		10	0		

**Schema editor**   **Expression editor**

**final\_output**

Column	Type	Date Pattern (Ctrl+Shift+D)	Length	Precision	Default	Comment
FactViolationSK	int		10	0		
Violation_SK	int		10	0		
Violations_Points	integer		10	0		
DL_CreateDate	Date	"dd-MM-yyyy"	23	3		
DL_WorkflowFileName	String		21474836...	0		
Inspection_SK	int		10	0		

## T-UniqRow of Fact\_Violation

**Designer** | **Code**

**Job(Fct\_Violation 0.1)**   **Context (Fct\_Violation)**   **Component**   **Run (Job Fct\_Violation)**   **Cloud Artifact**

**tUniqRow\_1**

Basic settings		Schema	Built-In	Edit schema	Sync columns
<b>Unique key</b>		Column	<input type="checkbox"/> Key attribute	<input type="checkbox"/> Case sensitive	
		Violation_SK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Violations_Points	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		DL_CreateDate	<input type="checkbox"/>	<input type="checkbox"/>	
		DL_WorkflowFileName	<input type="checkbox"/>	<input type="checkbox"/>	
		Inspection_SK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

## SQL Output:

```
95
96 select top 100 * from Fact_Violation
97
```

80 %

Results Messages

FactViolationSK	Violation_SK	Violations_Points	DI_CreateDate	DI_WorkflowFileName	Inspection_SK
1	1	30	2024-03-11 23:51:01.870	C:/Users/dhirt/Documents/NEU/Sem 2/DADABL/midter...	92738
2	2	20	2024-03-11 23:51:01.877	C:/Users/dhirt/Documents/NEU/Sem 2/DADABL/midter...	93596
3	3	100	2024-03-11 23:51:01.877	C:/Users/dhirt/Documents/NEU/Sem 2/DADABL/midter...	93596
4	4	100	2024-03-11 23:51:01.877	C:/Users/dhirt/Documents/NEU/Sem 2/DADABL/midter...	93596
5	5	100	2024-03-11 23:51:01.877	C:/Users/dhirt/Documents/NEU/Sem 2/DADABL/midter...	93596
6	6	100	2024-03-11 23:51:01.877	C:/Users/dhirt/Documents/NEU/Sem 2/DADABL/midter...	93596
7	7	100	2024-03-11 23:51:01.877	C:/Users/dhirt/Documents/NEU/Sem 2/DADABL/midter...	93596
8	8	100	2024-03-11 23:51:01.877	C:/Users/dhirt/Documents/NEU/Sem 2/DADABL/midter...	93596
9	9	100	2024-03-11 23:51:01.877	C:/Users/dhirt/Documents/NEU/Sem 2/DADABL/midter...	93596
10	10	100	2024-03-11 23:51:01.877	C:/Users/dhirt/Documents/NEU/Sem 2/DADABL/midter...	93596
11	11	100	2024-03-11 23:51:01.877	C:/Users/dhirt/Documents/NEU/Sem 2/DADABL/midter...	93596
12	12	100	2024-03-11 23:51:01.880	C:/Users/dhirt/Documents/NEU/Sem 2/DADABL/midter...	93596
13	13	100	2024-03-11 23:51:01.880	C:/Users/dhirt/Documents/NEU/Sem 2/DADABL/midter...	93596
14	14	100	2024-03-11 23:51:01.880	C:/Users/dhirt/Documents/NEU/Sem 2/DADABL/midter...	93596
15	15	100	2024-03-11 23:51:01.887	C:/Users/dhirt/Documents/NEU/Sem 2/DADABL/midter...	93596
16	16	100	2024-03-11 23:51:01.887	C:/Users/dhirt/Documents/NEU/Sem 2/DADABL/midter...	93596
17	17	100	2024-03-11 23:51:01.887	C:/Users/dhirt/Documents/NEU/Sem 2/DADABL/midter...	93596
18	18	100	2024-03-11 23:51:01.887	C:/Users/dhirt/Documents/NEU/Sem 2/DADABL/midter...	93596
19	19	100	2024-03-11 23:51:01.887	C:/Users/dhirt/Documents/NEU/Sem 2/DADABL/midter...	93596
20	20	100	2024-03-11 23:51:01.887	C:/Users/dhirt/Documents/NEU/Sem 2/DADABL/midter...	93596
21	21	100	2024-03-11 23:51:01.890	C:/Users/dhirt/Documents/NEU/Sem 2/DADABL/midter...	93596
22	22	100	2024-03-11 23:51:01.890	C:/Users/dhirt/Documents/NEU/Sem 2/DADABL/midter...	93596
23	23	1	2024-03-11 23:51:01.890	C:/Users/dhirt/Documents/NEU/Sem 2/DADABL/midter...	93596
24	24	32	2024-03-11 23:51:01.890	C:/Users/dhirt/Documents/NEU/Sem 2/DADABL/midter...	93596
25	25	32	2024-03-11 23:51:01.890	C:/Users/dhirt/Documents/NEU/Sem 2/DADABL/midter...	93596
26	26	32	2024-03-11 23:51:01.890	C:/Users/dhirt/Documents/NEU/Sem 2/DADABL/midter...	94362

✓ Query executed successfully.

| DHIR (16.0 RTM) | DHIR\dh...

## DELIVERABLES – PART 4:

### STEP 1: CREATE VISUALIZATION DASHBOARDS

Created visualization Dashboards using both PowerBI and Tableau

PowerBI:

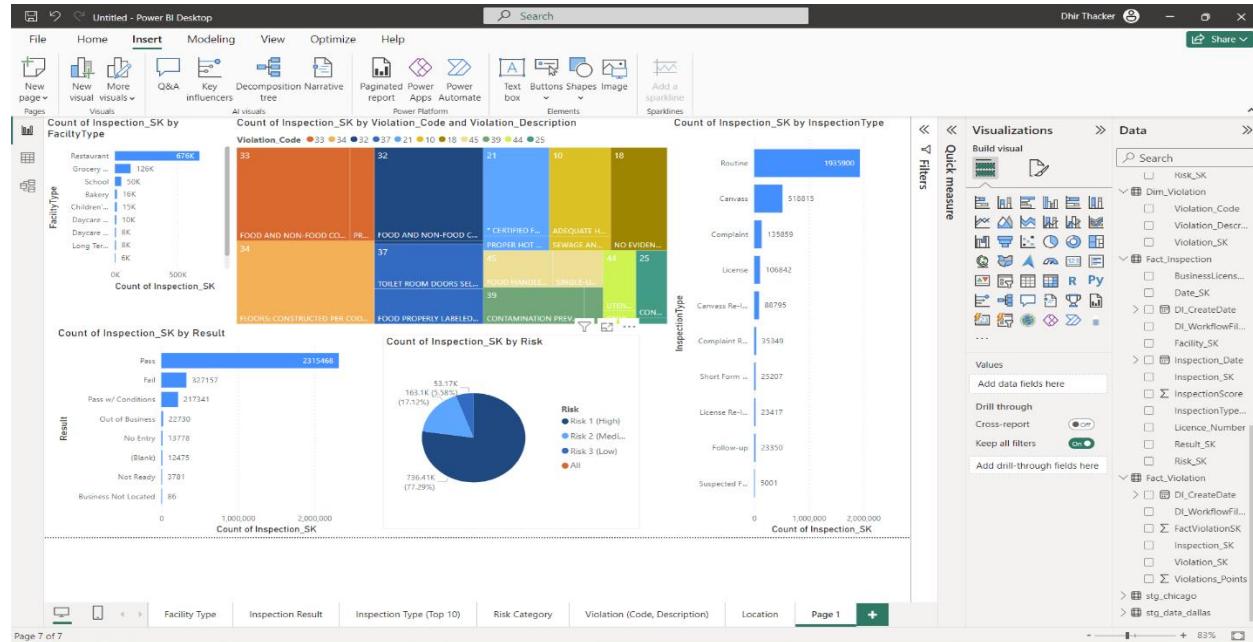


Tableau:

