Crime Dataset

Dataset Description:

- Crime Data set contains posting date. Homicides, rapes, robberies, aggravated assaults, burglaries, thefts, motor vehicle thefts, arsonists, and drug offenses are included (based on the primary offense listed for each incident).
- **Columns:**
  1- INC NUMBER

Label: Crime Incident Number

Description: The incident number is a numeric field that is the unique identifier for each crime incident. The first 4 digits of the incident number refer to the year that the crime was reported. Records with shorter incident numbers that start with the 4 digits for the year followed by the number 8 reflect crimes that were reported by a citizen via the online reporting application. The other incidents are ones where an officer took the crime report. Note that the date a crime was reported can sometimes differ from the date the crime occurred.

2- OCCURRED ON:

Label: Earliest Date and Time of Occurrence of Crime

Description: A date/time field that provides information on when the crime occurred. Sometimes the victim does not know the exact time the crime occurred. For example, a person may leave for work in the morning and return in the evening to find that their home has been burglarized. The 'OCCURRED_ON' field is the earliest date/time that the crime could have happened. In this case right after the person left for work. Together, the

'OCCURRED_ON' and 'OCCURRED_TO' fields provide a range of when the crime could have occurred. If the victim knows the exact date and time of the crime, then the date is normally only listed in one field, the 'OCCURRED ON' field.

3- OCCURRED TO:

Label: Latest Date and Time of Occurrence of Crime

Description: A date/time field that provides information on when the crime occurred. Sometimes the victim does not know the exact time the crime occurred. For example, a person may leave for work in the morning and return in the evening to find that their home has been burglarized. The 'OCCURRED_TO' field is the latest date/time that the crime could have happened. In this case right before the person returned home from work. Together, the 'OCCURRED_ON' and 'OCCURRED_TO' fields provide a range of when the crime could have occurred. If the victim knows the exact date and time of the crime, then the date is normally only listed in one field, the 'OCCURRED_ON' field.

5-UCR CRIME CATEGORY

Label: Uniform Crime Reporting (UCR) crime type

Description: A description of what type of crime occurred based on the offense that was marked by the officer as the primary offense for the incident (more than one offense may be listed as occurring during the same incident). The category for the type of crime is based on the Uniform Crime Reporting (UCR) offense grouping for the primary offense, which may or may not align with the crime category that the official UCR hierarchy criteria would specify for that incident. UCR follows federal crime reporting criteria for categorizing crimes, and UCR can differ from state-specific Arizona Revised Statute (ARS) criteria. Homicides, rapes, robberies, aggravated assaults, burglaries, larcenies/thefts, motor vehicle thefts, arsons, and drug crimes are included. All other crime types are excluded from the data. Crime categories can change as more information about the incident is obtained.

6- 100 BLOCK ADDR

Label: Hundred Block Address

Description: The address where the crime occurred, anonymized to the hundred block for victim confidentiality.

7-ZIP

Label: Zip Code

Description: **The zip code that corresponds with the address of the crime.**

8- PREMISE TYPE:

Label: Type of Location/Premise

Description: A brief description of the type of location where the crime occurred such as at an apartment, single family house, restaurant, convenience market, etc.
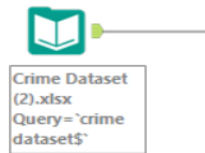
9-GRID:

Label: Grid

Description: The City of Phoenix is divided into small geographic areas referred to as grids. Grids are approximately quarter square mile areas, and grid boundaries tend to fall on main streets. Some intersection addresses fall cleanly into one grid and some fall on the border of multiple grids. The crime records where the address falls on the border of multiple grids may not have a grid assigned for that incident in this data set.
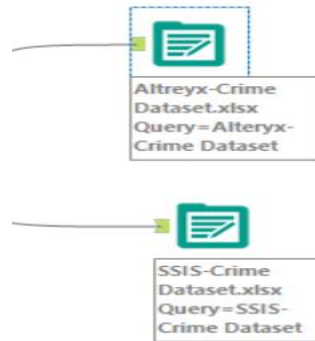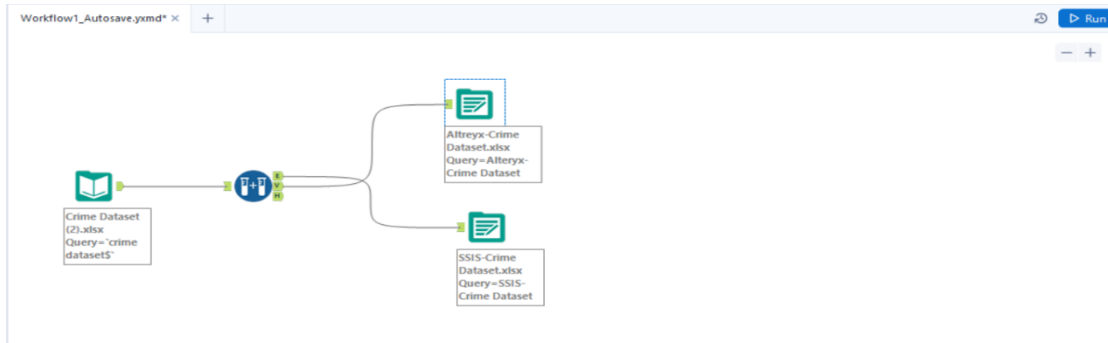
Project documentation
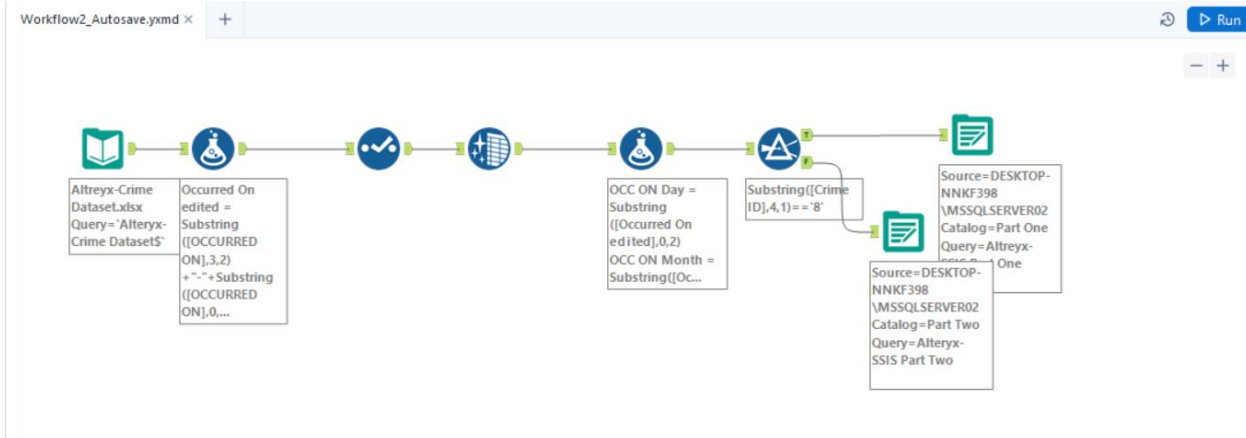
Input data tool   **create samples tool**   **output data tool**

Crime Dataset
(2).xlsx
Query=`crime
dataset$`

Altreyx-Crime
Dataset.xlsx
Query=Alteryx-
Crime Dataset

SSIS-Crime
Dataset.xlsx
Query=SSIS-
Crime Dataset

workflow1 Alteryx:

Workflow1_Autosave.yxmd* × +   ⟳ ▷ Run

Altreyx-Crime
Dataset.xlsx
Query=Alteryx-
Crime Dataset

Crime Dataset
(2).xlsx
Query=`crime
dataset$`

SSIS-Crime
Dataset.xlsx
Query=SSIS-
Crime Dataset

Workflow2 Alteryx:

Workflow2_Autosave.yxmd × +   ⟳ ▷ Run

Altreyx-Crime
Dataset.xlsx
Query=`Alteryx-
Crime Dataset$`

Occurred On
edited =
Substring
([OCCURRED
ON],3,2)
+"-"+Substring
([OCCURRED
ON],0,...

OCC ON Day =
Substring
([Occurred On
edited],0,2)
OCC ON Month =
Substring([Oc...

Substring([Crime
ID],4,1)=='8'

Source=DESKTOP-
NNKF398
\MSSQLSERVER02
Catalog=Part One
Query=Altreyx-
SSIS Part One

Source=DESKTOP-
NNKF398
\MSSQLSERVER02
Catalog=Part Two
Query=Altreyx-
SSIS Part Two

Formula Tool   **Select Tool**   **Data Cleansing tool**   **Formula Tool**   **filter tool**

Occurred On
edited =
Substring
([OCCURRED
ON],3,2)
+"-"+Substring
([OCCURRED
ON],0,...

OCC ON Day =
Substring
([Occurred On
edited],0,2)
OCC ON Month =
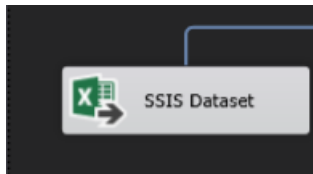Substring([Oc...

Substring([Crime
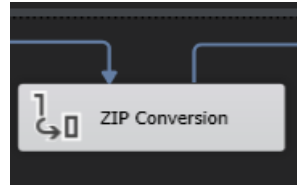ID],4,1)=='8'

SSIS DataFlow:
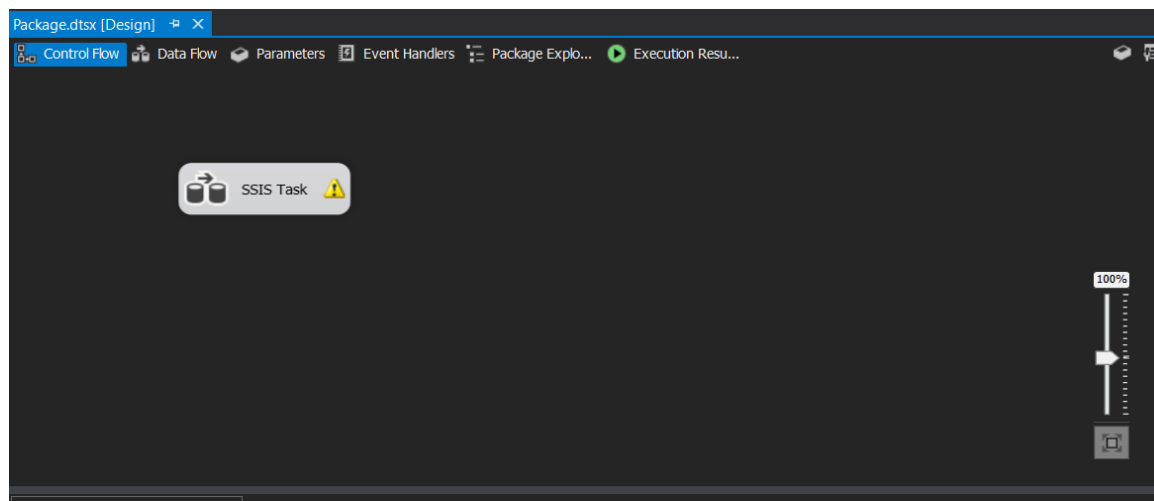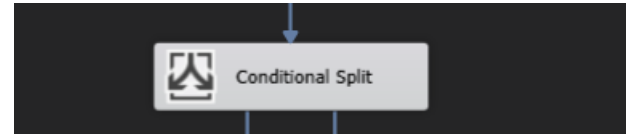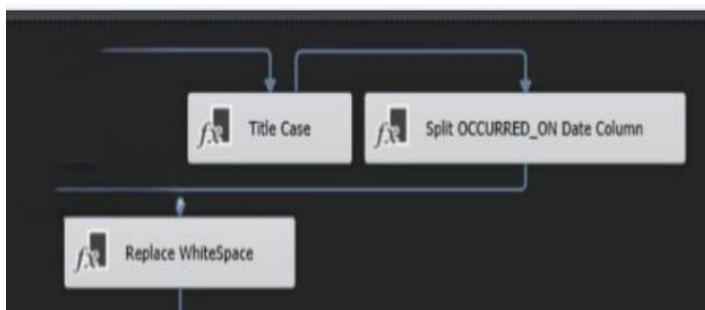

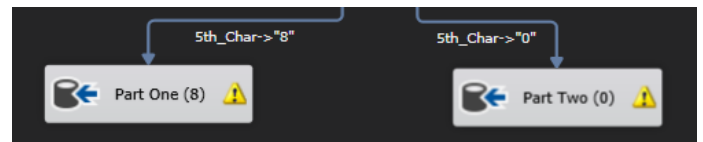## Workflow SSIS:
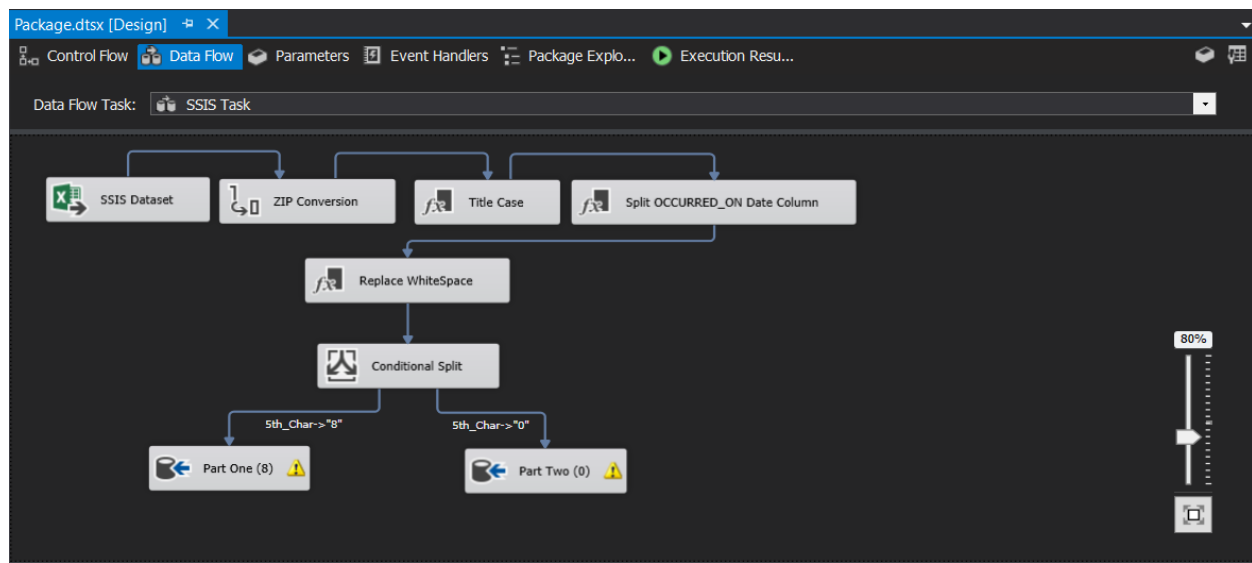
source component(excel)

Data Conversion
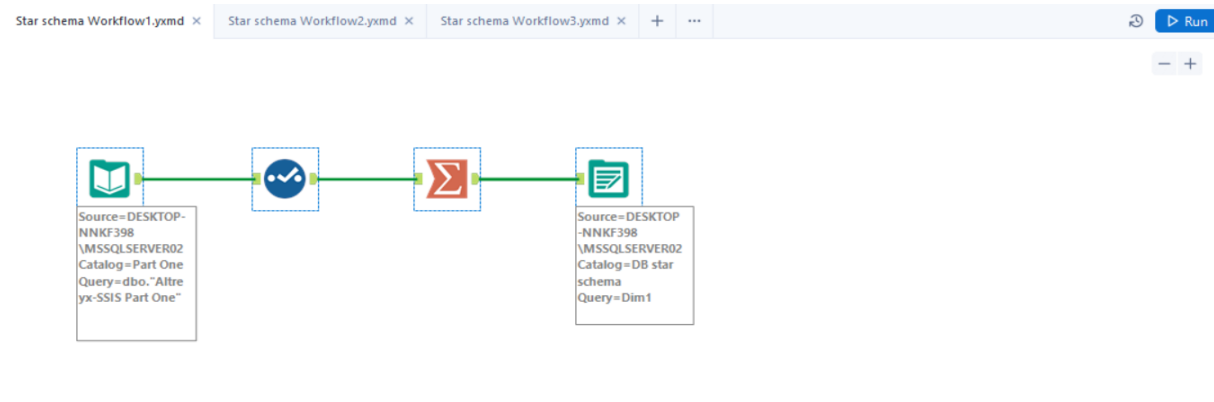

conditional split

Derived columns
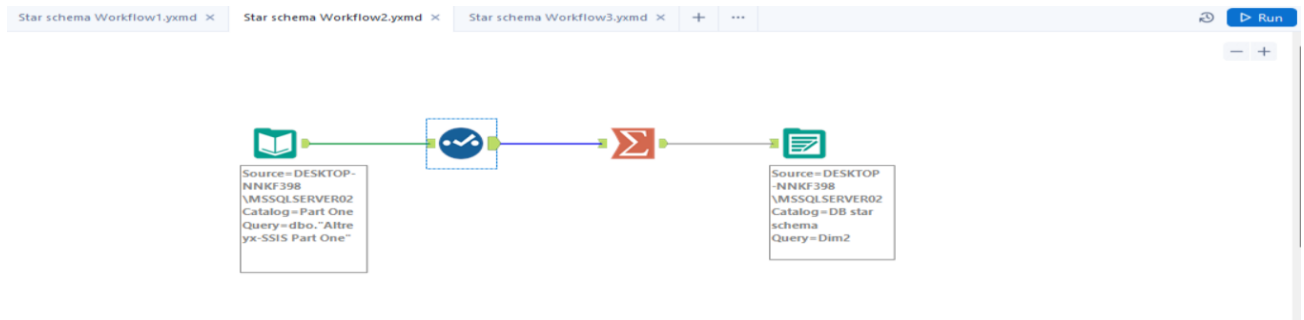

OLDB Destination

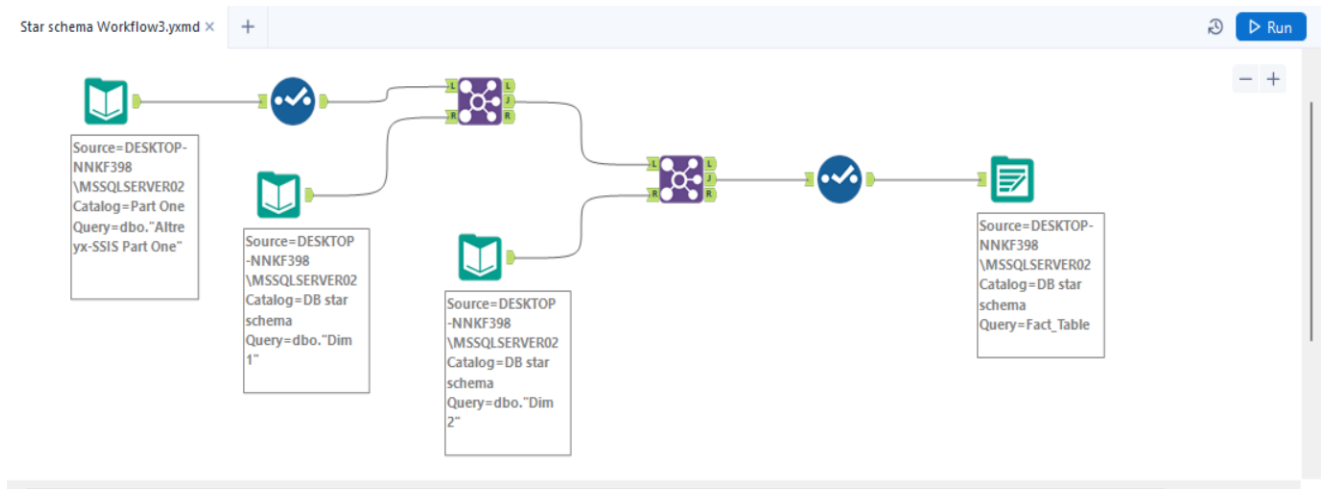## Works flows Star schema Alteryx :

Workflow1

Workflow2

Workflow3
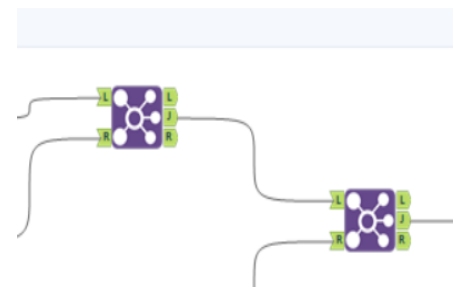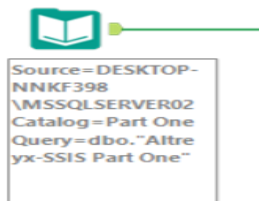

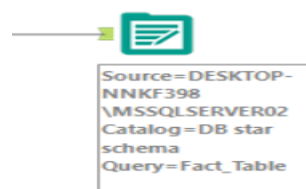**input data tool**   **select tool**   **summarize tool**   **Join tool**

output data tool

What decisions should be taken depending on charts results:

The decisions that should be taken based on charts results for a crime dataset will depend on the specific insights and patterns that are revealed in the charts. Here are some general guidelines that can help you make decisions based on the insights from charts:

Identify trends and patterns: Look for trends and patterns in the data to identify potential areas of concern or opportunities for improvement. For example, if you notice that crime rates are higher in certain areas or during certain times of the day, this can help you focus your resources on those areas or times.

Determine the cause: Try to determine the cause of any trends or patterns you identify. For example, if crime rates are higher in certain areas, is it because of a lack of police presence, poverty, or other factors? Understanding the cause can help you develop effective solutions.

Take action: Based on the insights from the charts, take action to address any issues or opportunities. This could include increasing police patrols in high-crime areas, implementing crime prevention programs, or improving lighting and security measures in public spaces.

Monitor progress: Use charts to monitor the progress of any actions you take. This will help you determine if your efforts are making a difference and if further action is needed.

Overall, charts can be a powerful tool for understanding crime data and making informed decisions. By analyzing the data and taking action based on the insights you gain, you can help to reduce crime and improve public safety in your community.