01 Overview of HW 3

HW 3 - Transforming & Staging

Homework 3

Transforming & Staging

01

SQL Database +
Data Factory

02

Transform

Change ‘DateA’
to Date

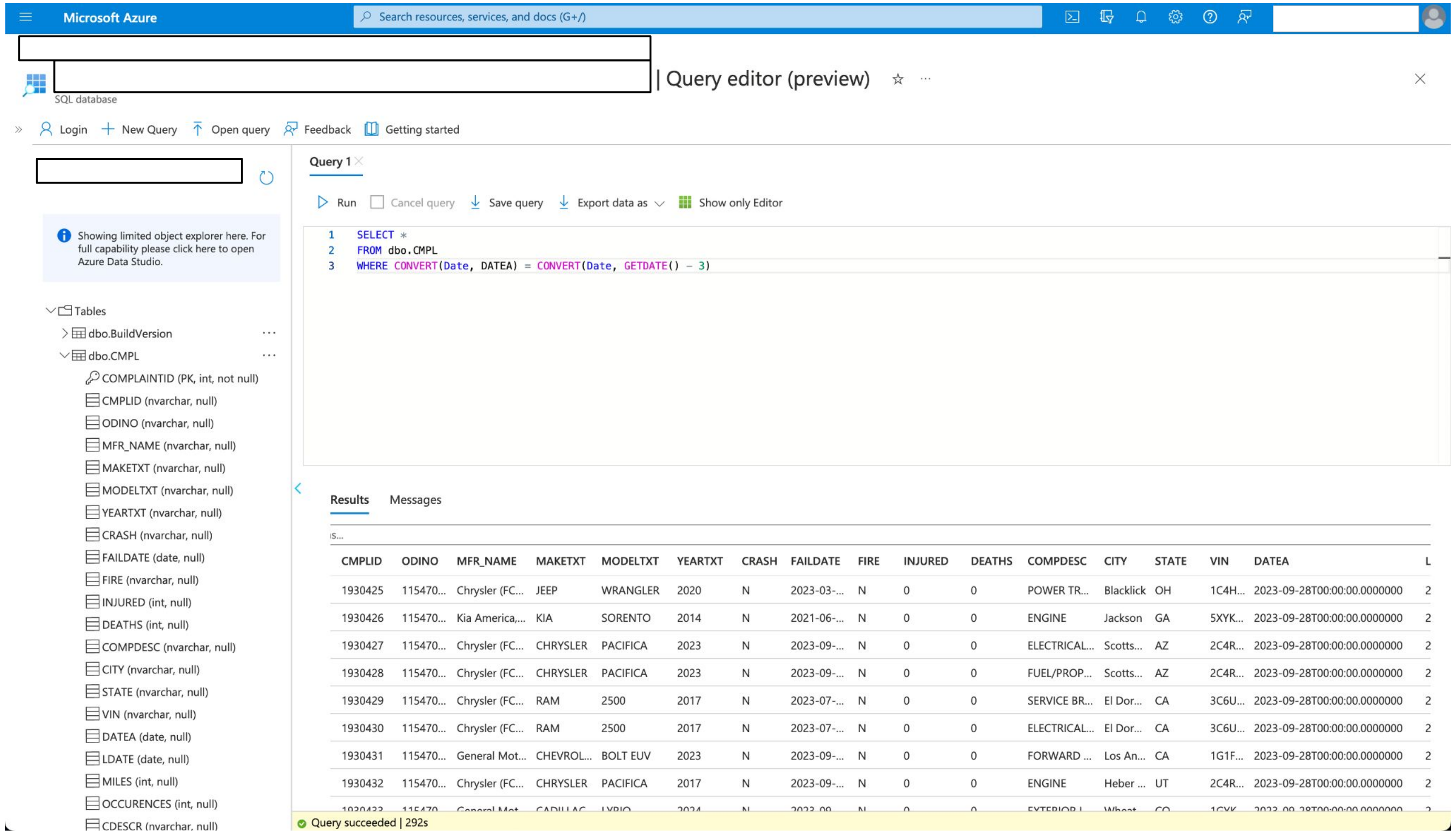
03

Staging

Copy Data to
SQL DB Table

HW3 Final Output

Most Recently Updated Rows/Observations from the SQL Table Data



[redacted]

[redacted] | Query editor (preview)

SQL database

[redacted]

Showing limited object explorer here. For full capability please click here to open Azure Data Studio.

- Tables
  - dbo.BuildVersion
  - dbo.CMPL
    - COMPLAINTID (PK, int, not null)
    - CMPLID (nvarchar, null)
    - ODINO (nvarchar, null)
    - MFR_NAME (nvarchar, null)
    - MAKETXT (nvarchar, null)
    - MODELTXT (nvarchar, null)
    - YEARTXT (nvarchar, null)
    - CRASH (nvarchar, null)
    - FAILDATE (date, null)
    - FIRE (nvarchar, null)
    - INJURED (int, null)
    - DEATHS (int, null)
    - COMPDESC (nvarchar, null)
    - CITY (nvarchar, null)
    - STATE (nvarchar, null)
    - VIN (nvarchar, null)
    - DATEA (date, null)
    - LDATE (date, null)
    - MILES (int, null)
    - OCCURENCES (int, null)
    - CDESCR (nvarchar, null)

```sql
SELECT *
FROM dbo.CMPL
WHERE CONVERT(Date, DATEA) = CONVERT(Date, GETDATE() - 3)
```

CMPLID	ODINO	MFR_NAME	MAKETXT	MODELTXT	YEARTXT	CRASH	FAILDATE	FIRE	INJURED	DEATHS	COMPDESC	CITY	STATE	VIN	DATEA	L
1930425	115470...	Chrysler (FC...	JEEP	WRANGLER	2020	N	2023-03-...	N	0	0	POWER TR...	Blacklick	OH	1C4H...	2023-09-28T00:00:00.0000000	2
1930426	115470...	Kia America,...	KIA	SORENTO	2014	N	2021-06-...	N	0	0	ENGINE	Jackson	GA	5XYK...	2023-09-28T00:00:00.0000000	2
1930427	115470...	Chrysler (FC...	CHRYSLER	PACIFICA	2023	N	2023-09-...	N	0	0	ELECTRICAL...	Scotts...	AZ	2C4R...	2023-09-28T00:00:00.0000000	2
1930428	115470...	Chrysler (FC...	CHRYSLER	PACIFICA	2023	N	2023-09-...	N	0	0	FUEL/PROP...	Scotts...	AZ	2C4R...	2023-09-28T00:00:00.0000000	2
1930429	115470...	Chrysler (FC...	RAM	2500	2017	N	2023-07-...	N	0	0	SERVICE BR...	El Dor...	CA	3C6U...	2023-09-28T00:00:00.0000000	2
1930430	115470...	Chrysler (FC...	RAM	2500	2017	N	2023-07-...	N	0	0	ELECTRICAL...	El Dor...	CA	3C6U...	2023-09-28T00:00:00.0000000	2
1930431	115470...	General Mot...	CHEVROL...	BOLT EUV	2023	N	2023-09-...	N	0	0	FORWARD ...	Los An...	CA	1G1F...	2023-09-28T00:00:00.0000000	2
1930432	115470...	Chrysler (FC...	CHRYSLER	PACIFICA	2017	N	2023-09-...	N	0	0	ENGINE	Heber ...	UT	2C4R...	2023-09-28T00:00:00.0000000	2
1930433	115470...	General Mot...	CADILLAC	LYRIQ	2024	N	2023-09...	N	0	0	EXTERIOR L...	Wheat...	CO	1GYK...	2023-09-28T00:00:00.0000000	2

Query succeeded | 292s

Homework 3

Transforming & Staging

01

SQL Database

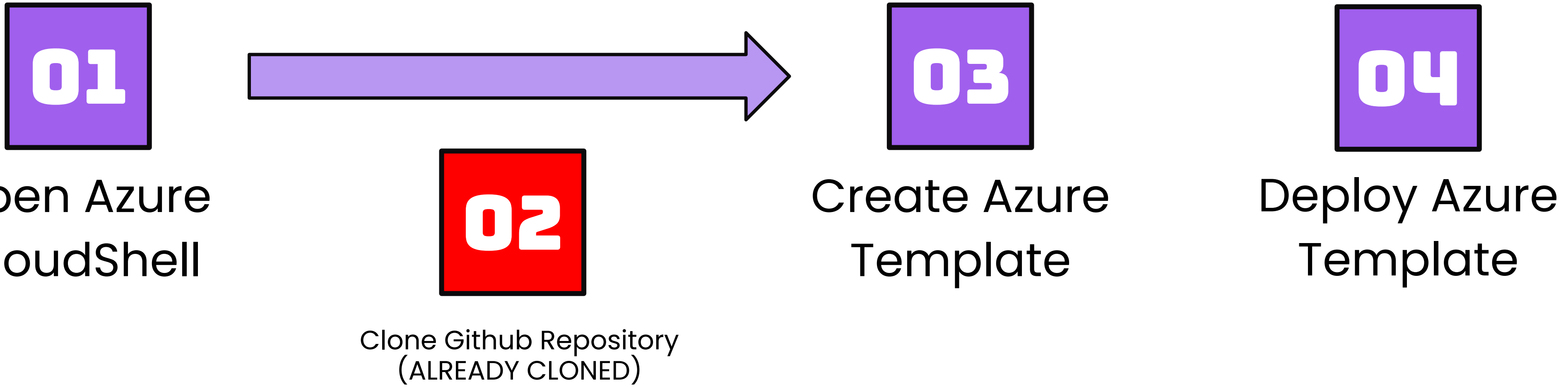
02

Data Factory

03

SQL Database

0. Deploy hw3 template



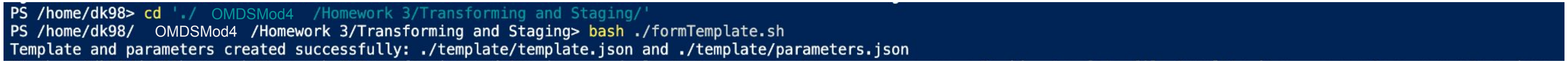
01
Open Azure CloudShell

02
Clone Github Repository
(ALREADY CLONED)

03
Create Azure Template

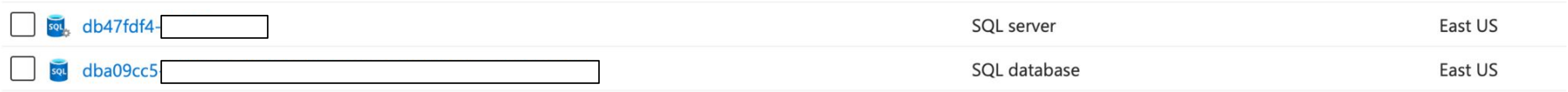
04
Deploy Azure Template

*Hint



```
PS /home/dk98> cd './  OMDSMod4  /Homework 3/Transforming and Staging/'
PS /home/dk98/  OMDSMod4  /Homework 3/Transforming and Staging> bash ./formTemplate.sh
Template and parameters created successfully: ./template/template.json and ./template/parameters.json
```

Deployment Result

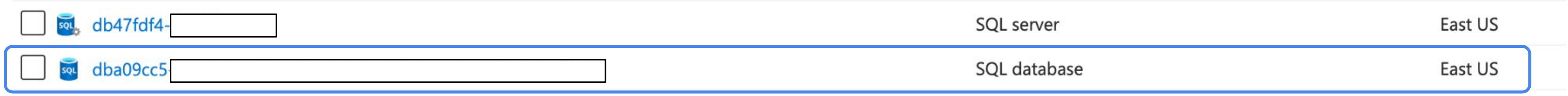


□	db47fdf4-[redacted]	SQL server	East US
□	dba09cc5[redacted]	SQL database	East US

Azure SQL Database

Azure SQL Server

1. Go to Azure SQL Database

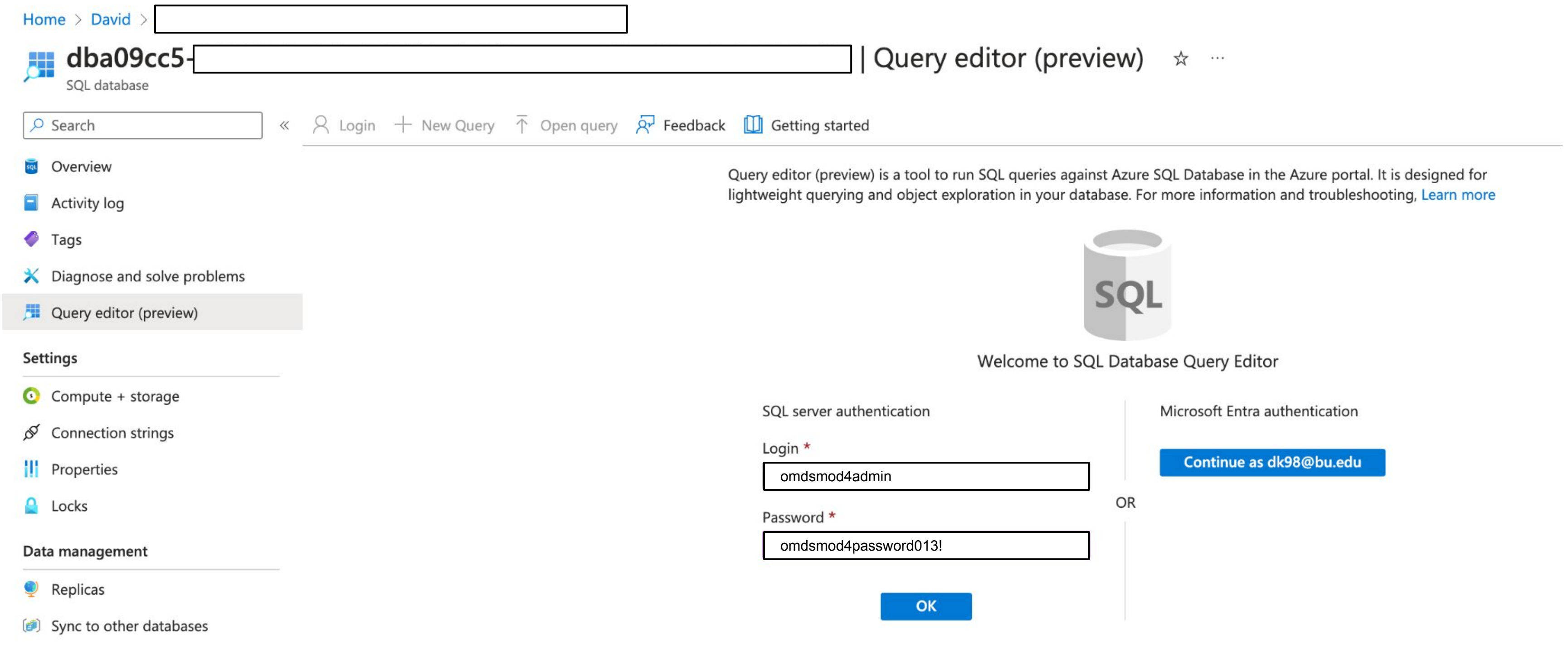


□	db47fdf4-[redacted]	SQL server	East US
□	dba09cc5[redacted]	SQL database	East US

Azure SQL Database

Azure SQL Server

1.1 Access Query Editor in SQL DB



Home > David > [redacted]

dba09cc5-[redacted] | Query editor (preview) ☆ ···

SQL database

Query editor (preview) is a tool to run SQL queries against Azure SQL Database in the Azure portal. It is designed for lightweight querying and object exploration in your database. For more information and troubleshooting, Learn more

Welcome to SQL Database Query Editor

SQL server authentication

Login *
omdsmod4admin

Password *
omdsmod4password013!

OK

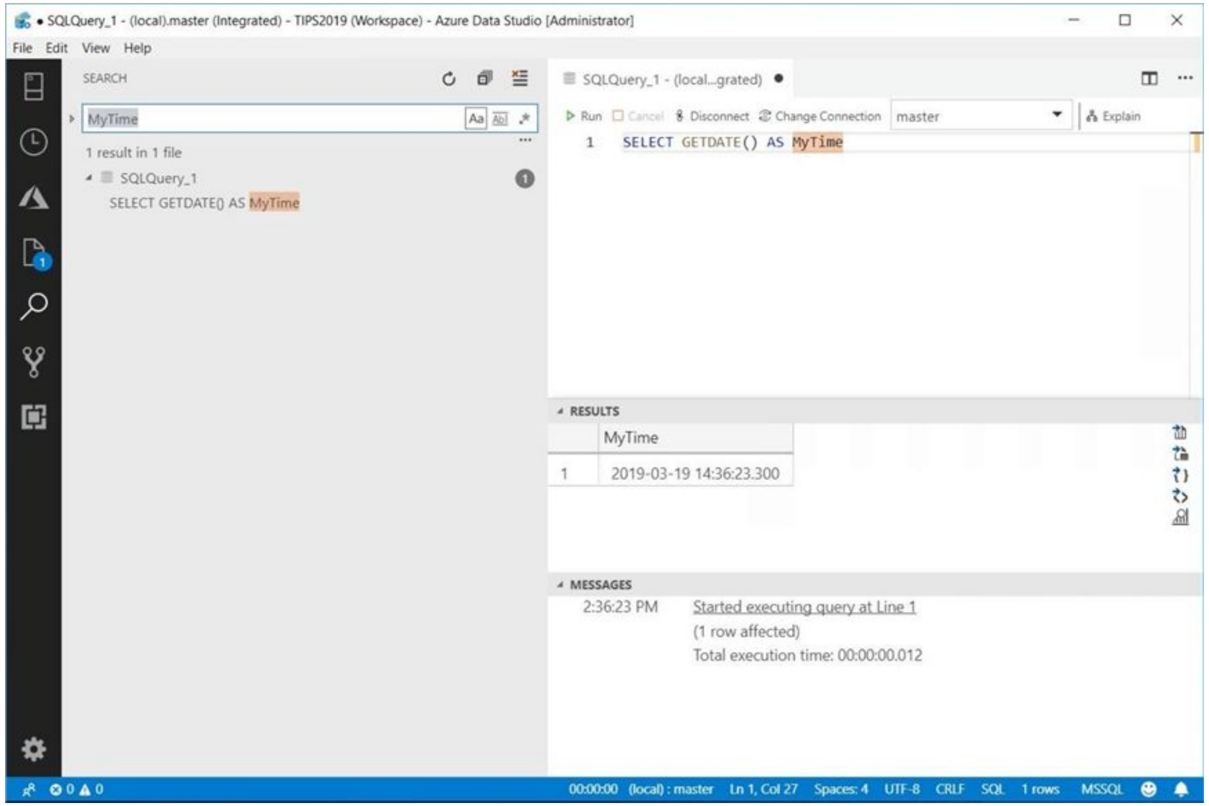
OR

Microsoft Entra authentication

Continue as dk98@bu.edu

1.1 Or Azure Data Studio

Link


● SQLQuery_1 - (local).master (Integrated) - TIPS2019 (Workspace) - Azure Data Studio [Administrator]
File Edit View Help
SEARCH
MyTime
1 result in 1 file
SQLQuery_1
SELECT GETDATE() AS MyTime
SQLQuery_1 - (local...grated)
Run Cancel Disconnect Change Connection master Explain
RESULTS
MESSAGES
⊗ 0 ⚠ 0 00:00:00 (local) : master Ln 1, Col 27 Spaces: 4 UTF-8 CRLF SQL 1 rows MSSQL

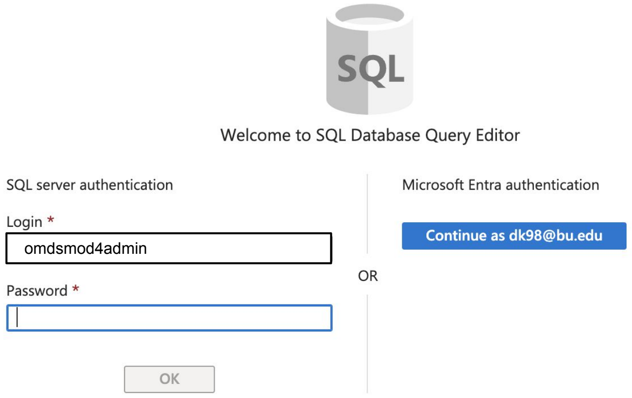
```sql
SELECT GETDATE() AS MyTime
```

	MyTime
1	2019-03-19 14:36:23.300

```
2:36:23 PM   Started executing query at Line 1
             (1 row affected)
             Total execution time: 00:00:00.012
```

1.2 Authentication

1. Deployed our template:
   a. Login: omdsmod4admin
   b. Password: omdsmod4password013!
2. Created SQL Database Manually:
   a. Own Credentials



Welcome to SQL Database Query Editor

SQL server authentication

Login *

omdsmod4admin

Password *

OR

Microsoft Entra authentication

*Firewall Error

If Prompted,

Give Access to your own IP Address

1.3 Create Table in SQL Database

Look at Reference File to create the following query

CREATE TABLE Complaints

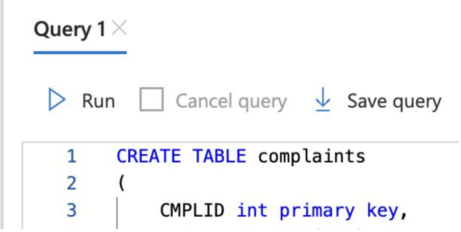
(CMPLID int Primary,

      *Hint: NVARCHAR(max),

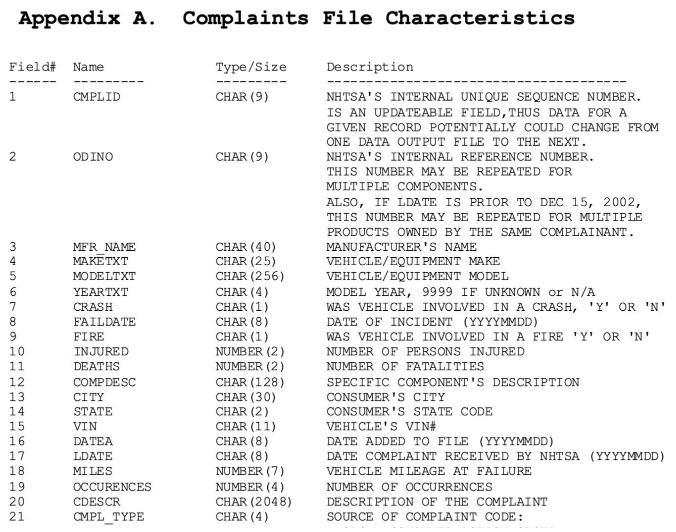
      …

      DATEA **date**,

)



```
CREATE TABLE complaints
(
    CMPLID int primary key,
```



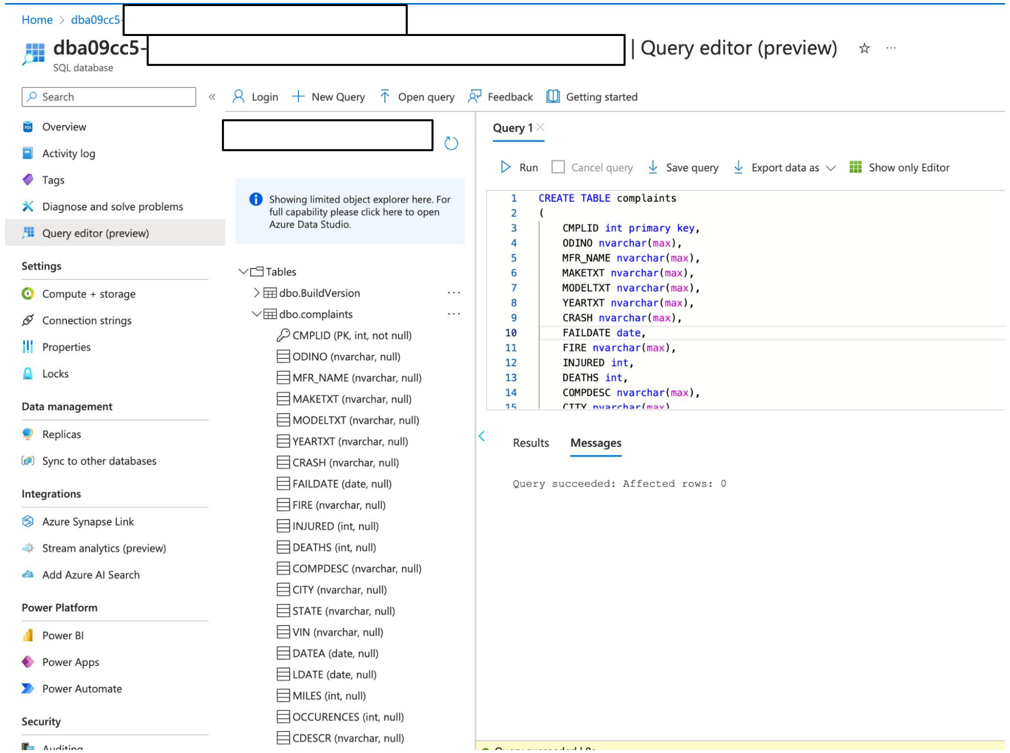
Appendix A. Complaints File Characteristics

Field#	Name	Type/Size	Description
1	CMPLID	CHAR(9)	NHTSA'S INTERNAL UNIQUE SEQUENCE NUMBER. IS AN UPDATEABLE FIELD,THUS DATA FOR A GIVEN RECORD POTENTIALLY COULD CHANGE FROM ONE DATA OUTPUT FILE TO THE NEXT.
2	ODINO	CHAR(9)	NHTSA'S INTERNAL REFERENCE NUMBER. THIS NUMBER MAY BE REPEATED FOR MULTIPLE COMPONENTS. ALSO, IF LDATE IS PRIOR TO DEC 15, 2002, THIS NUMBER MAY BE REPEATED FOR MULTIPLE PRODUCTS OWNED BY THE SAME COMPLAINANT.
3	MFR_NAME	CHAR(40)	MANUFACTURER'S NAME
4	MAKETXT	CHAR(25)	VEHICLE/EQUIPMENT MAKE
5	MODELTXT	CHAR(256)	VEHICLE/EQUIPMENT MODEL
6	YEARTXT	CHAR(4)	MODEL YEAR, 9999 IF UNKNOWN or N/A
7	CRASH	CHAR(1)	WAS VEHICLE INVOLVED IN A CRASH, 'Y' OR 'N'
8	FAILDATE	CHAR(8)	DATE OF INCIDENT (YYYYMMDD)
9	FIRE	CHAR(1)	WAS VEHICLE INVOLVED IN A FIRE 'Y' OR 'N'
10	INJURED	NUMBER(2)	NUMBER OF PERSONS INJURED
11	DEATHS	NUMBER(2)	NUMBER OF FATALITIES
12	COMPDESC	CHAR(128)	SPECIFIC COMPONENT'S DESCRIPTION
13	CITY	CHAR(30)	CONSUMER'S CITY
14	STATE	CHAR(2)	CONSUMER'S STATE CODE
15	VIN	CHAR(11)	VEHICLE'S VIN#
16	DATEA	CHAR(8)	DATE ADDED TO FILE (YYYYMMDD)
17	LDATE	CHAR(8)	DATE COMPLAINT RECEIVED BY NHTSA (YYYYMMDD)
18	MILES	NUMBER(7)	VEHICLE MILEAGE AT FAILURE
19	OCCURENCES	NUMBER(4)	NUMBER OF OCCURRENCES
20	CDESCR	CHAR(2048)	DESCRIPTION OF THE COMPLAINT
21	CMPL_TYPE	CHAR(4)	SOURCE OF COMPLAINT CODE:

```sql
CREATE TABLE complaints (
    CMPLID int primary key,
    ODINO nvarchar(max),
    MFR_NAME nvarchar(max),
    MAKETXT nvarchar(max),
    MODELTXT nvarchar(max),
    YEARTXT nvarchar(max),
    CRASH nvarchar(max),
    FAILDATE date,
    FIRE nvarchar(max),
    INJURED int,
    DEATHS int,
    COMPDESC nvarchar(max),
    CITY nvarchar(max),
    STATE nvarchar(max),
    VIN nvarchar(max),
    DATEA date,
    LDATE date,
    MILES int,
    OCCURENCES int,
    CDESCR nvarchar(max),
    CMPL_TYPE nvarchar(max),
    POLICE_RPT_YN nvarchar(max),
    PURCH_DT date,
    ORIG_OWNER_YN nvarchar(max),
    ANTI_BRAKES_YN nvarchar(max),
    CRUISE_CONT_YN nvarchar(max),
    NUM_CYLS int,
    DRIVE_TRAIN nvarchar(max),
    FUEL_SYS nvarchar(max),
    FUEL_TYPE nvarchar(max),
    TRANS_TYPE nvarchar(max),
    VEH_SPEED int,
    DOT nvarchar(max),
    TIRE_SIZE nvarchar(max),
    LOC_OF_TIRE nvarchar(max),
    TIRE_FAIL_TYPE nvarchar(max),
    ORIG_EQUIP_YN nvarchar(max),
    MANUF_DT date,
    SEAT_TYPE nvarchar(max),
    RESTRAINT_TYPE nvarchar(max),
    DEALER_NAME nvarchar(max),
    DEALER_TEL nvarchar(max),
    DEALER_CITY nvarchar(max),
    DEALER_STATE nvarchar(max),
    DEALER_ZIP nvarchar(max),
    PROD_TYPE nvarchar(max),
    REPAIRED_YN nvarchar(max),
    MEDICAL_ATTN nvarchar(max),
    VEHICLES_TOWED_YN nvarchar(max)
)
```

The decision to utilize nvarchar(max) instead of adhering to the reference file is due to the presence of human error in the data.

1.4 Check your ‘complaints’ Table



Home > dba09cc5-[redacted]

dba09cc5-[redacted] | Query editor (preview) ☆ ···

SQL database

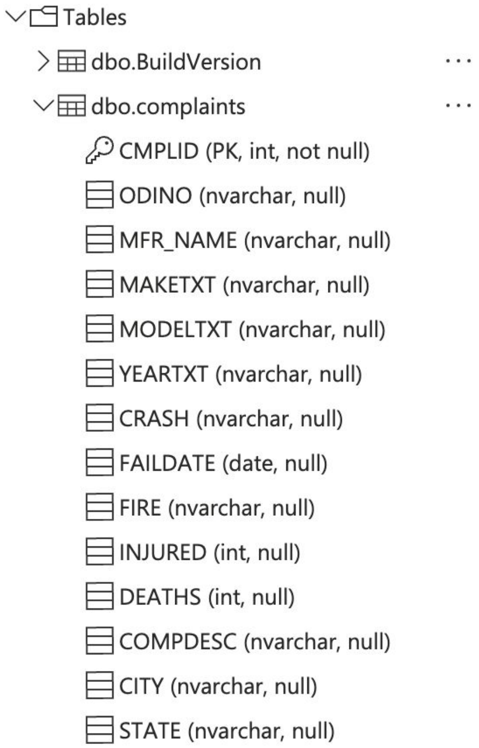
[redacted]

Showing limited object explorer here. For full capability please click here to open Azure Data Studio.

- Tables
  - dbo.BuildVersion
  - dbo.complaints
    - CMPLID (PK, int, not null)
    - ODINO (nvarchar, null)
    - MFR_NAME (nvarchar, null)
    - MAKETXT (nvarchar, null)
    - MODELTXT (nvarchar, null)
    - YEARTXT (nvarchar, null)
    - CRASH (nvarchar, null)
    - FAILDATE (date, null)
    - FIRE (nvarchar, null)
    - INJURED (int, null)
    - DEATHS (int, null)
    - COMPDESC (nvarchar, null)
    - CITY (nvarchar, null)
    - STATE (nvarchar, null)
    - VIN (nvarchar, null)
    - DATEA (date, null)
    - LDATE (date, null)
    - MILES (int, null)
    - OCCURENCES (int, null)
    - CDESCR (nvarchar, null)

```
CREATE TABLE complaints
(
    CMPLID int primary key,
    ODINO nvarchar(max),
    MFR_NAME nvarchar(max),
    MAKETXT nvarchar(max),
    MODELTXT nvarchar(max),
    YEARTXT nvarchar(max),
    CRASH nvarchar(max),
    FAILDATE date,
    FIRE nvarchar(max),
    INJURED int,
    DEATHS int,
    COMPDESC nvarchar(max),
    CITY nvarchar(max)
```

```
Query succeeded: Affected rows: 0
```

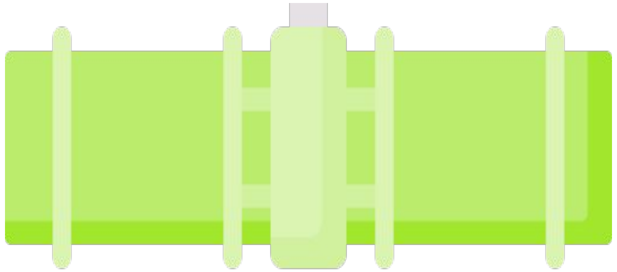


- Tables
  - dbo.BuildVersion ···
  - dbo.complaints ···
    - CMPLID (PK, int, not null)
    - ODINO (nvarchar, null)
    - MFR_NAME (nvarchar, null)
    - MAKETXT (nvarchar, null)
    - MODELTXT (nvarchar, null)
    - YEARTXT (nvarchar, null)
    - CRASH (nvarchar, null)
    - FAILDATE (date, null)
    - FIRE (nvarchar, null)
    - INJURED (int, null)
    - DEATHS (int, null)
    - COMPDESC (nvarchar, null)
    - CITY (nvarchar, null)
    - STATE (nvarchar, null)

2. Data Factory

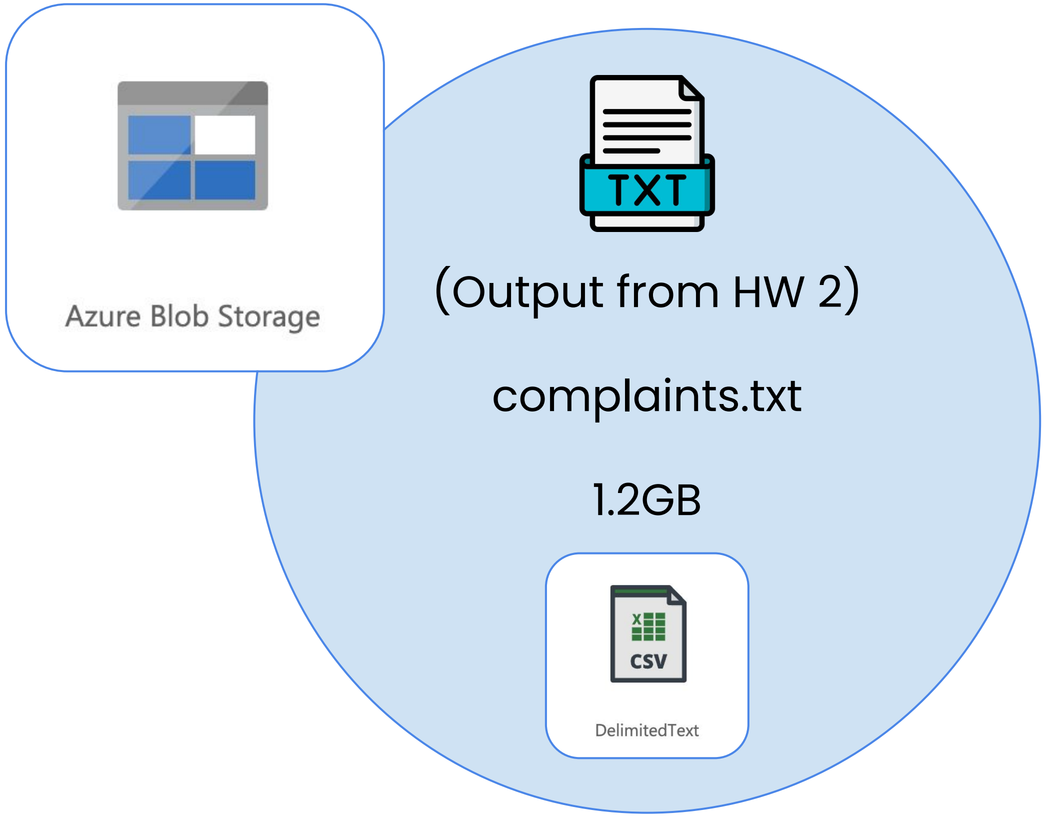
01

COPY DATA 1



Transform + Stage

Copy Data 1 - Source



(Output from HW 2)

complaints.txt

1.2GB

Source

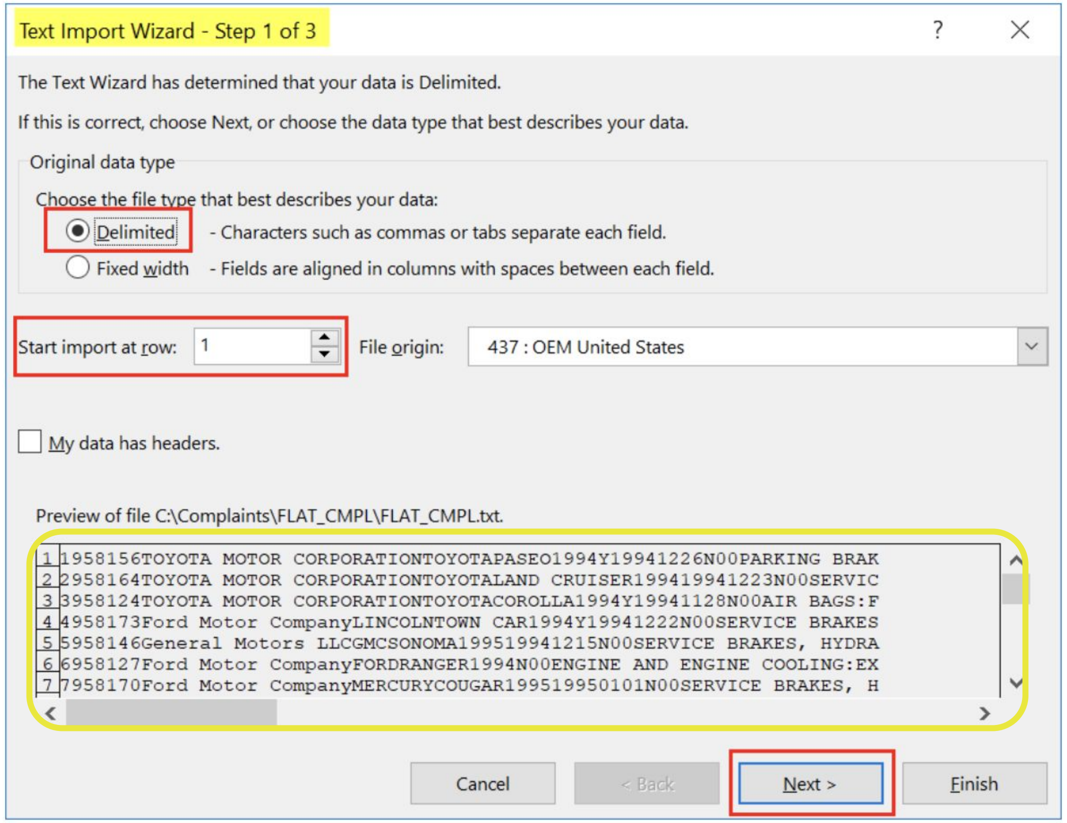
Azure Blob Storage

Delimited Text

complaints.txt

*Import Schema - 49 Columns

Delimited Text? Delimiter?



Text Import Wizard - Step 1 of 3

The Text Wizard has determined that your data is Delimited.

If this is correct, choose Next, or choose the data type that best describes your data.

Original data type

Choose the file type that best describes your data:

● Delimited - Characters such as commas or tabs separate each field.

○ Fixed width - Fields are aligned in columns with spaces between each field.

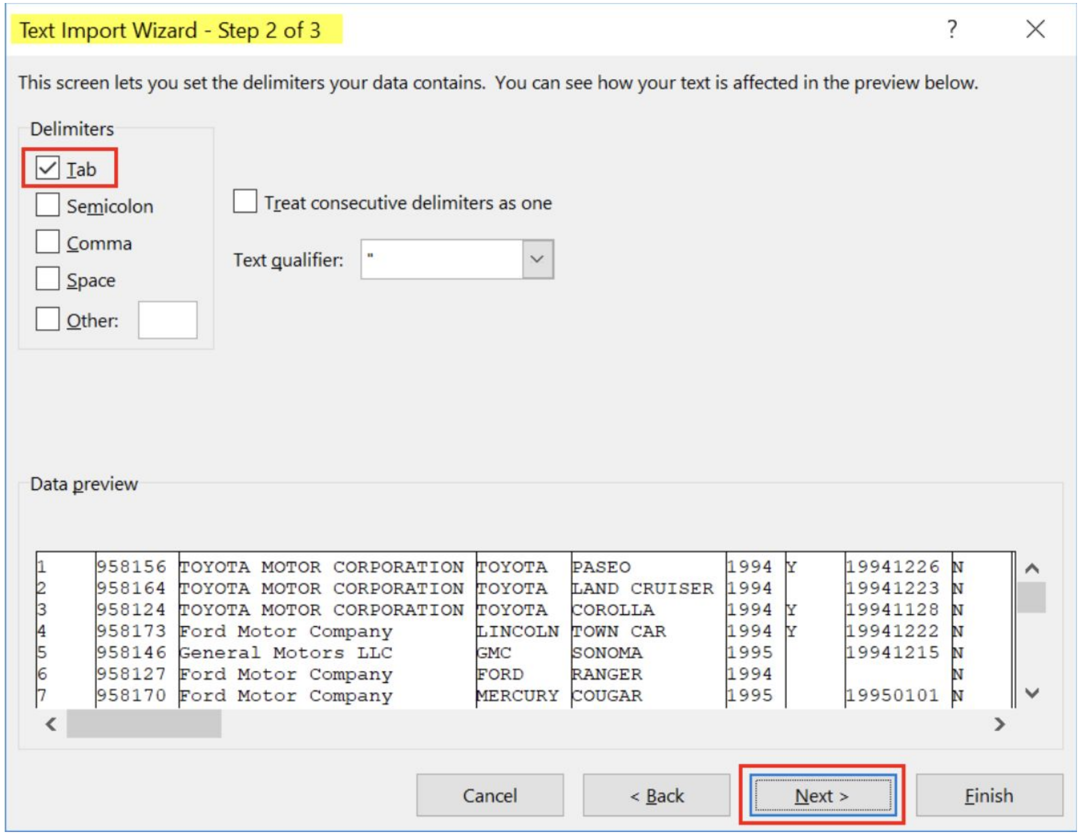
Start import at row: 1

File origin: 437 : OEM United States

□ My data has headers.

Preview of file C:\Complaints\FLAT_CMPL\FLAT_CMPL.txt.

```
1 1958156TOYOTA MOTOR CORPORATIONTOYOTAPASEO1994Y19941226N00PARKING BRAK
2 2958164TOYOTA MOTOR CORPORATIONTOYOTALAND CRUISER199419941223N00SERVIC
3 3958124TOYOTA MOTOR CORPORATIONTOYOTACOROLLA1994Y19941128N00AIR BAGS:F
4 4958173Ford Motor CompanyLINCOLNTOWN CAR1994Y19941222N00SERVICE BRAKES
5 5958146General Motors LLCGMCSONOMA199519941215N00SERVICE BRAKES, HYDRA
6 6958127Ford Motor CompanyFORDRANGER1994N00ENGINE AND ENGINE COOLING:EX
7 7958170Ford Motor CompanyMERCURYCOUGAR199519950101N00SERVICE BRAKES, H
```



Text Import Wizard - Step 2 of 3

This screen lets you set the delimiters your data contains. You can see how your text is affected in the preview below.

Delimiters

☑ Tab

□ Semicolon

□ Comma

□ Space

□ Other:

□ Treat consecutive delimiters as one

Text qualifier: "

Data preview

1	958156	TOYOTA MOTOR CORPORATION	TOYOTA	PASEO	1994	Y	19941226	N
2	958164	TOYOTA MOTOR CORPORATION	TOYOTA	LAND CRUISER	1994		19941223	N
3	958124	TOYOTA MOTOR CORPORATION	TOYOTA	COROLLA	1994	Y	19941128	N
4	958173	Ford Motor Company	LINCOLN	TOWN CAR	1994	Y	19941222	N
5	958146	General Motors LLC	GMC	SONOMA	1995		19941215	N
6	958127	Ford Motor Company	FORD	RANGER	1994			N
7	958170	Ford Motor Company	MERCURY	COUGAR	1995		19950101	N

Copy Data 1 - Sink

Azure SQL Database

Complaints Table

*Authentication:
Back to Slide ‘Authentication’

Sink

SQL Database

Table dbo.complaints

*Import Schema - 49 Columns

Copy Data Overview

Source

(Output from HW 2)

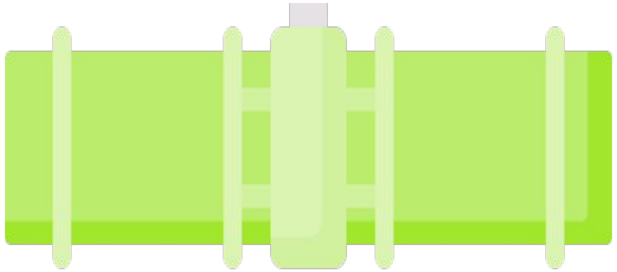
Azure Blob Storage

Delimited Text

.txt

01

COPY DATA 1



Transform + Stage

Sink

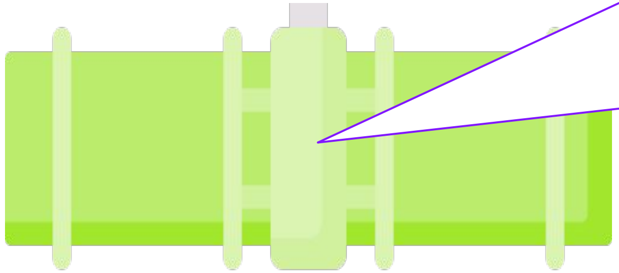
SQL Database

Table dbo.Complaints

Transform

01

COPY DATA 1



Transform

<Mapping>

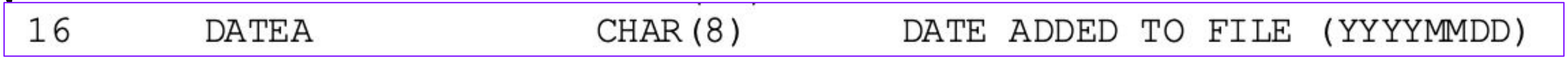
'DateA' Column

From 'String' to 'Date' Type

***Type Conversion Setting:**

- Datetime Format: yyyyMMdd

* From Reference File



```
16        DATEA                  CHAR(8)          DATE ADDED TO FILE (YYYYMMDD)
```

IMPORTANT!

Create Table

CMPLID INT PRIMARY

- Optional: Add ‘**NOT NULL**’
- Do not add **IDENTITY(1,1)**

Copy Data 1 ‘Settings’

*Navigate to **‘Fault Tolerance’**

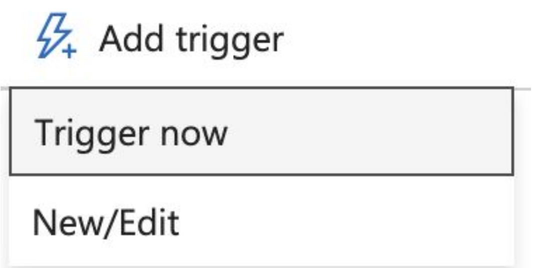
- ✅ **Skip Incompatible Rows**
- ☒ Logging
- This is to skip rows affected by **human errors**

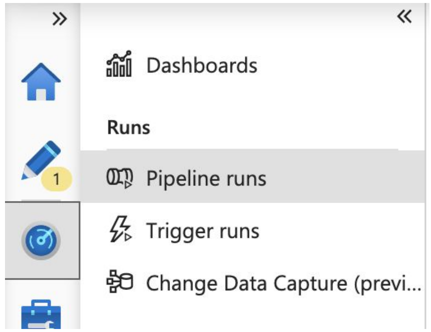
Running Pipeline

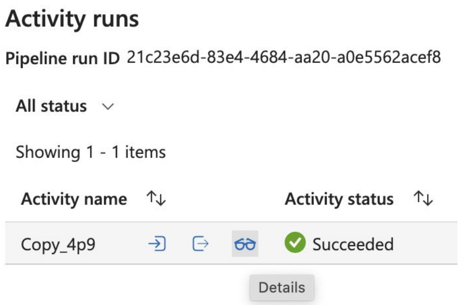
- Pipeline runs on **Azure Cloud**
  - Turning off your computer will not affect the run
- Approx. **2.0 hours** for completion
- **Monitor** to ensure the data is being read & written properly

*RUNNING A PIPELINE

- **Publish & Add Trigger** >> Cheaper than ‘Debug’ Action
- Monitor pipeline runs through the **‘monitor’** section
    - Go to details (eyeglasses icon) for details on data read & written)







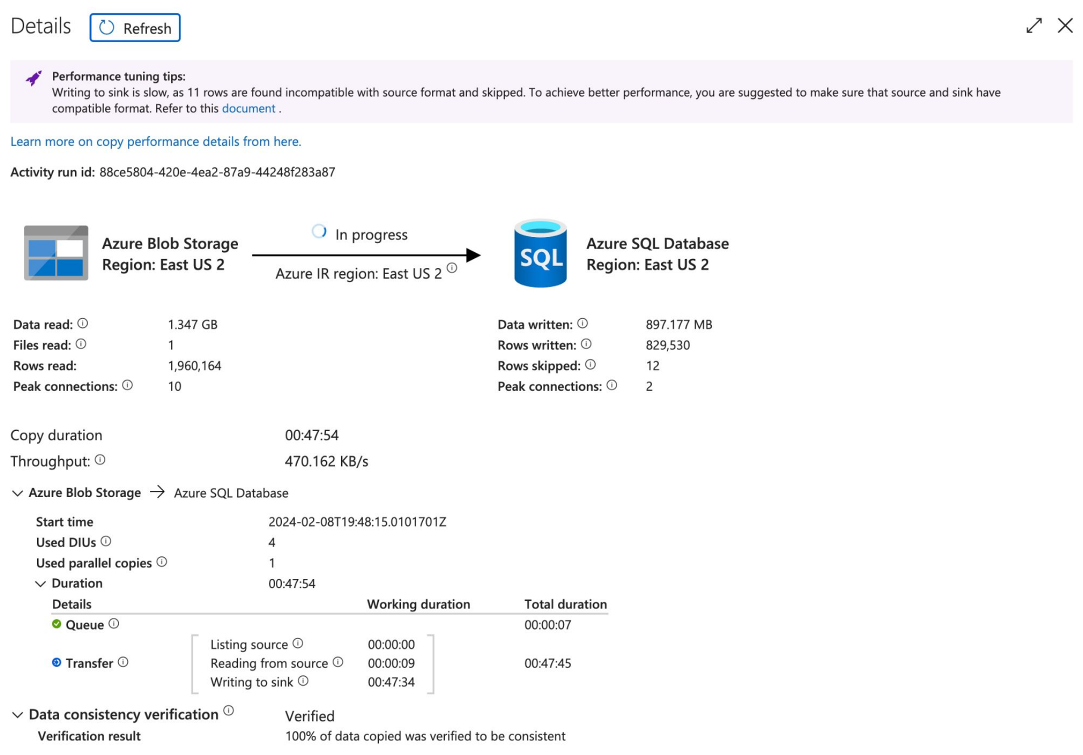
Activity runs

Pipeline run ID 21c23e6d-83e4-4684-aa20-a0e5562acef8

All status

Showing 1 - 1 items

Activity name		Activity status
Copy_4p9		✓ Succeeded



Details

Performance tuning tips:
Writing to sink is slow, as 11 rows are found incompatible with source format and skipped. To achieve better performance, you are suggested to make sure that source and sink have compatible format. Refer to this document .

Learn more on copy performance details from here.

Activity run id: 88ce5804-420e-4ea2-87a9-44248f283a87

Data read:	1.347 GB	**Data written:**	897.177 MB
Files read:	1	**Rows written:**	829,530
Rows read:	1,960,164	**Rows skipped:**	12
Peak connections:	10	**Peak connections:**	2

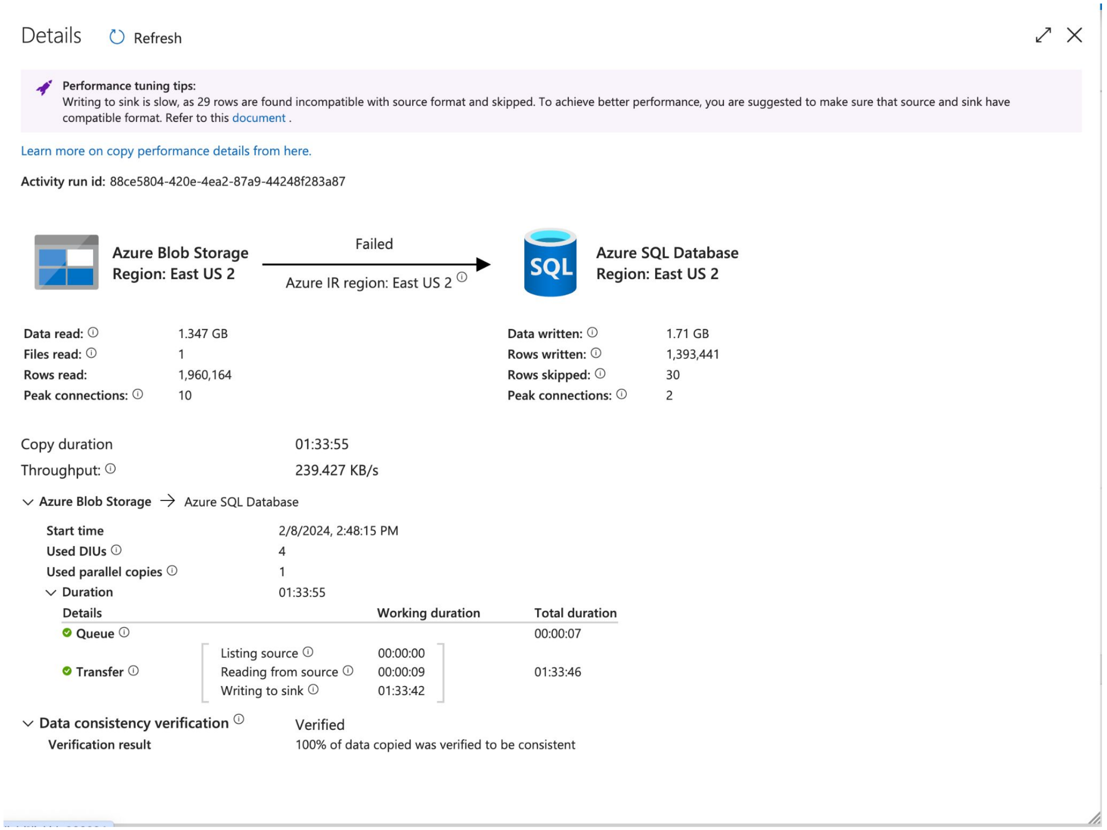
Copy duration	00:47:54
Throughput:	470.162 KB/s

Azure Blob Storage → Azure SQL Database

Start time	2024-02-08T19:48:15.0101701Z		
Used DIUs	4		
Used parallel copies	1		
Duration	00:47:54		
Details		**Working duration**	**Total duration**
Queue			00:00:07
Transfer	Listing source Reading from source Writing to sink	00:00:00 00:00:09 00:47:34	00:47:45

Data consistency verification Verified

Verification result 100% of data copied was verified to be consistent



Details

Performance tuning tips:
Writing to sink is slow, as 29 rows are found incompatible with source format and skipped. To achieve better performance, you are suggested to make sure that source and sink have compatible format. Refer to this document .

Learn more on copy performance details from here.

Activity run id: 88ce5804-420e-4ea2-87a9-44248f283a87

Data read:	1.347 GB	**Data written:**	1.71 GB
Files read:	1	**Rows written:**	1,393,441
Rows read:	1,960,164	**Rows skipped:**	30
Peak connections:	10	**Peak connections:**	2

Copy duration	01:33:55
Throughput:	239.427 KB/s

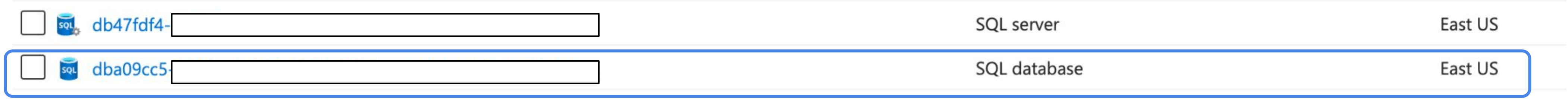
Azure Blob Storage → Azure SQL Database

Start time	2/8/2024, 2:48:15 PM		
Used DIUs	4		
Used parallel copies	1		
Duration	01:33:55		
Details		**Working duration**	**Total duration**
Queue			00:00:07
Transfer	Listing source Reading from source Writing to sink	00:00:00 00:00:09 01:33:42	01:33:46

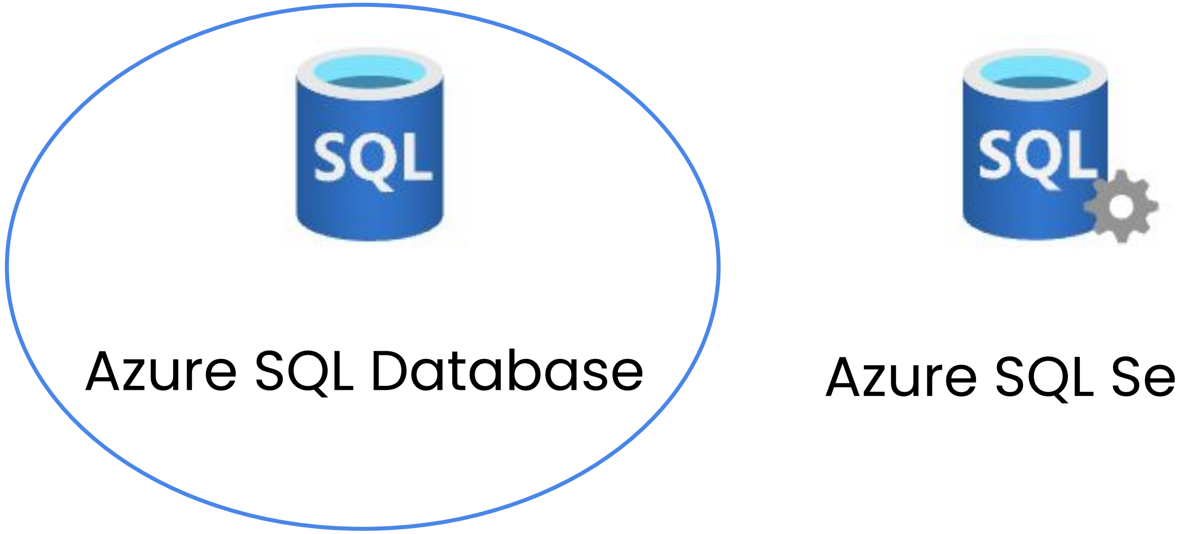
Data consistency verification Verified

Verification result 100% of data copied was verified to be consistent

3. Go back to Azure SQL Database



□	db47fdf4-[redacted]	SQL server	East US
□	dba09cc5[redacted]	SQL database	East US



Azure SQL Database

Azure SQL Server

SQL Queries

Final Query:

```
SELECT *
FROM Complaints
WHERE DATEA = CONVERT(Date, GETDATE()-1)
```

- ^^ Get Data From Yesterday?
- But… No Data From Yesterday?
- **Change the 1** in GETDATE()-1 to find the most recent date in your data

Find Today's Date (Azure Time Zone)

```
SELECT GETDATE()
```

- Azure's Time Zone is not EST

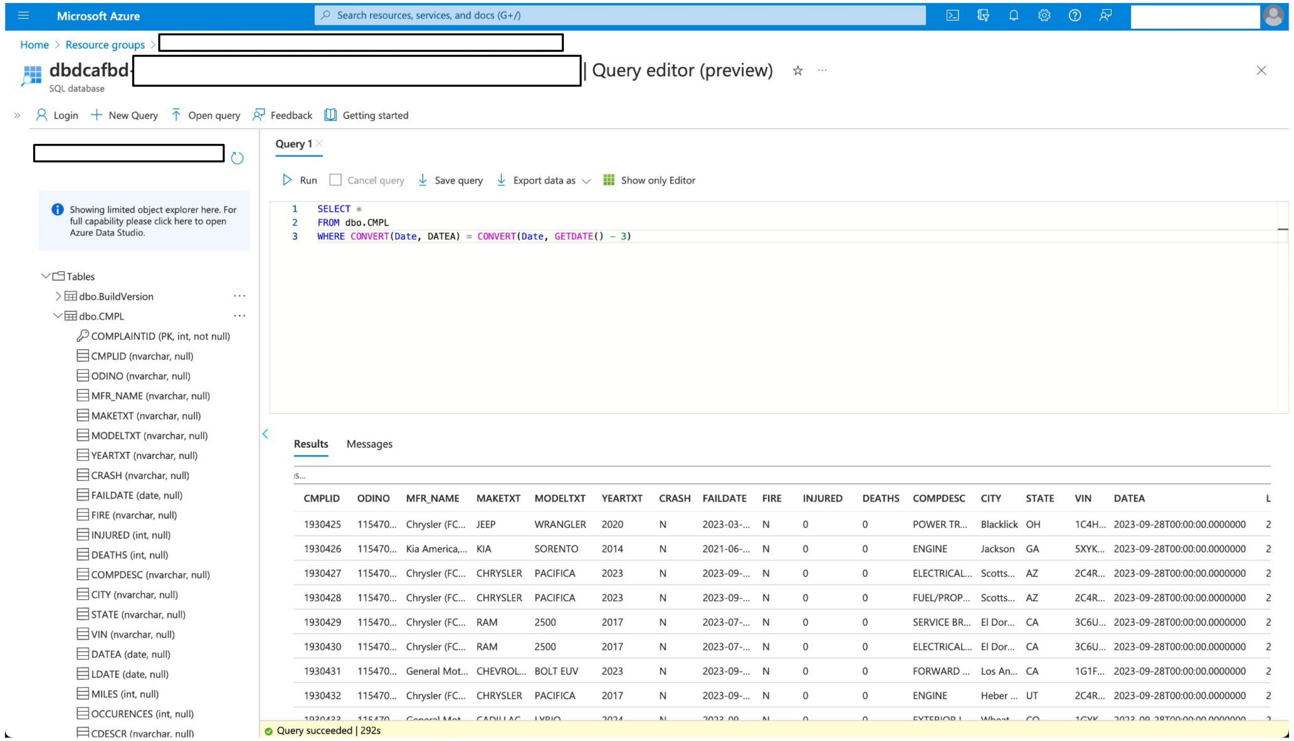
Find Dates in Data:

```
SELECT DISTINCT CONVERT(VARCHAR, DATEA)
FROM Complaints
ORDER BY CONVERT(VARCHAR, DATEA) DESC
```

- List the dates in 'DateA' column
- Descending order (Most recent on Top)

HW3 Screenshot

Transforming & Staging



[redacted]

Home > Resource groups > [redacted]

dbdcafbd-[redacted] | Query editor (preview) ☆ ···

SQL database

[redacted]

Showing limited object explorer here. For full capability please click here to open Azure Data Studio.

- Tables
  - dbo.BuildVersion
  - dbo.CMPL
    - COMPLAINTID (PK, int, not null)
    - CMPLID (nvarchar, null)
    - ODINO (nvarchar, null)
    - MFR_NAME (nvarchar, null)
    - MAKETXT (nvarchar, null)
    - MODELTXT (nvarchar, null)
    - YEARTXT (nvarchar, null)
    - CRASH (nvarchar, null)
    - FAILDATE (date, null)
    - FIRE (nvarchar, null)
    - INJURED (int, null)
    - DEATHS (int, null)
    - COMPDESC (nvarchar, null)
    - CITY (nvarchar, null)
    - STATE (nvarchar, null)
    - VIN (nvarchar, null)
    - DATEA (date, null)
    - LDATE (date, null)
    - MILES (int, null)
    - OCCURENCES (int, null)
    - CDESCR (nvarchar, null)

Query 1

```sql
SELECT *
FROM dbo.CMPL
WHERE CONVERT(Date, DATEA) = CONVERT(Date, GETDATE() - 3)
```

CMPLID	ODINO	MFR_NAME	MAKETXT	MODELTXT	YEARTXT	CRASH	FAILDATE	FIRE	INJURED	DEATHS	COMPDESC	CITY	STATE	VIN	DATEA	L
1930425	115470...	Chrysler (FC...	JEEP	WRANGLER	2020	N	2023-03-...	N	0	0	POWER TR...	Blacklick	OH	1C4H...	2023-09-28T00:00:00.0000000	2
1930426	115470...	Kia America,...	KIA	SORENTO	2014	N	2021-06-...	N	0	0	ENGINE	Jackson	GA	5XYK...	2023-09-28T00:00:00.0000000	2
1930427	115470...	Chrysler (FC...	CHRYSLER	PACIFICA	2023	N	2023-09-...	N	0	0	ELECTRICAL...	Scotts...	AZ	2C4R...	2023-09-28T00:00:00.0000000	2
1930428	115470...	Chrysler (FC...	CHRYSLER	PACIFICA	2023	N	2023-09-...	N	0	0	FUEL/PROP...	Scotts...	AZ	2C4R...	2023-09-28T00:00:00.0000000	2
1930429	115470...	Chrysler (FC...	RAM	2500	2017	N	2023-07-...	N	0	0	SERVICE BR...	El Dor...	CA	3C6U...	2023-09-28T00:00:00.0000000	2
1930430	115470...	Chrysler (FC...	RAM	2500	2017	N	2023-07-...	N	0	0	ELECTRICAL...	El Dor...	CA	3C6U...	2023-09-28T00:00:00.0000000	2
1930431	115470...	General Mot...	CHEVROL...	BOLT EUV	2023	N	2023-09-...	N	0	0	FORWARD ...	Los An...	CA	1G1F...	2023-09-28T00:00:00.0000000	2
1930432	115470...	Chrysler (FC...	CHRYSLER	PACIFICA	2017	N	2023-09-...	N	0	0	ENGINE	Heber ...	UT	2C4R...	2023-09-28T00:00:00.0000000	2
1930433	115470...	General Mot...	CADILLAC	LYRIQ	2024	N	2023-09-...	N	0	0	EXTERIOR L...	Wheat...	CO	1GYK...	2023-09-28T00:00:00.0000000	2

Query succeeded | 292s

Best of Luck!