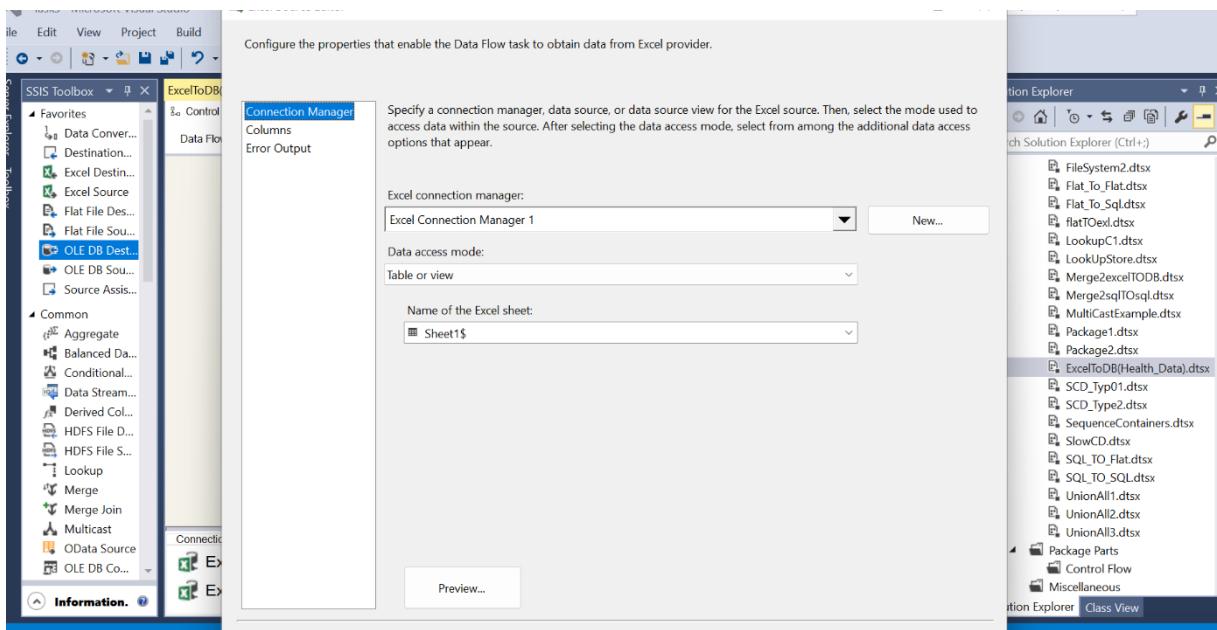


Module 2 SSIS:

1. Make connection to different data source (Oracle DB, Flatfile, SQL Server)
2. Extract
3. Transform
4. Load to new target system - SQL Server
5. Perform SCD 1 & SCD2 dimension table modelling
6. Create aggregate table based on the particular column(ex: Country code). Refer to the different data source from target system

1) Extracting data from the excel to database.

a) Selecting Excel as source and setting up connection manager

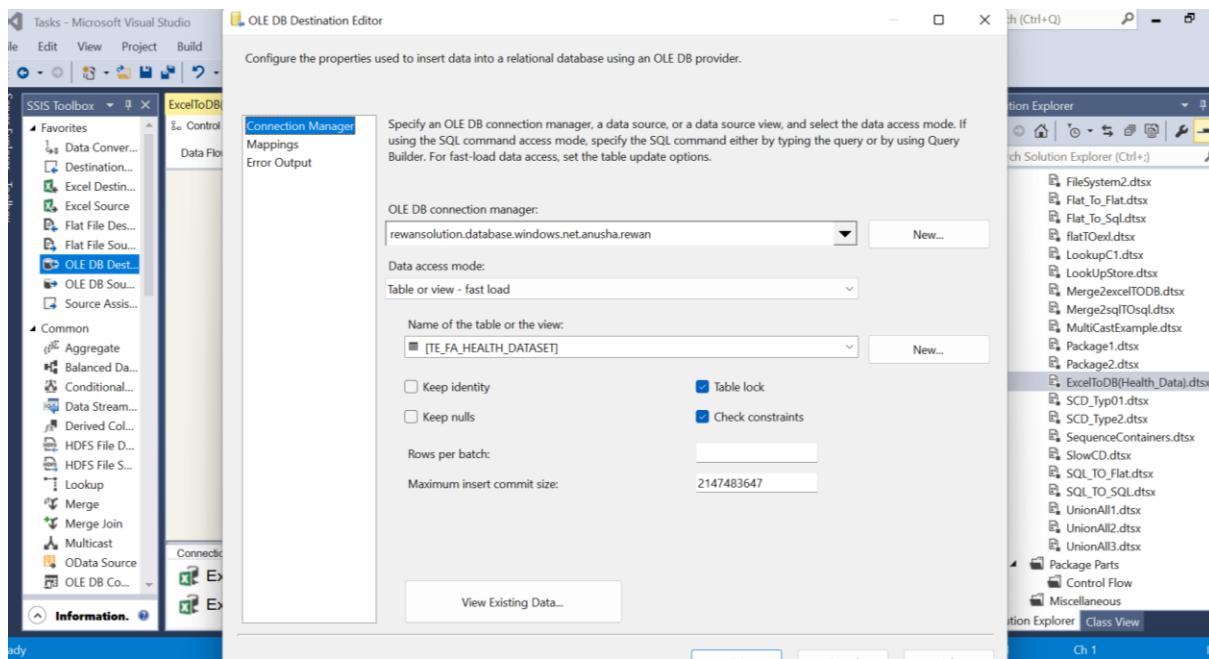


b) Creating new table in SQL Server

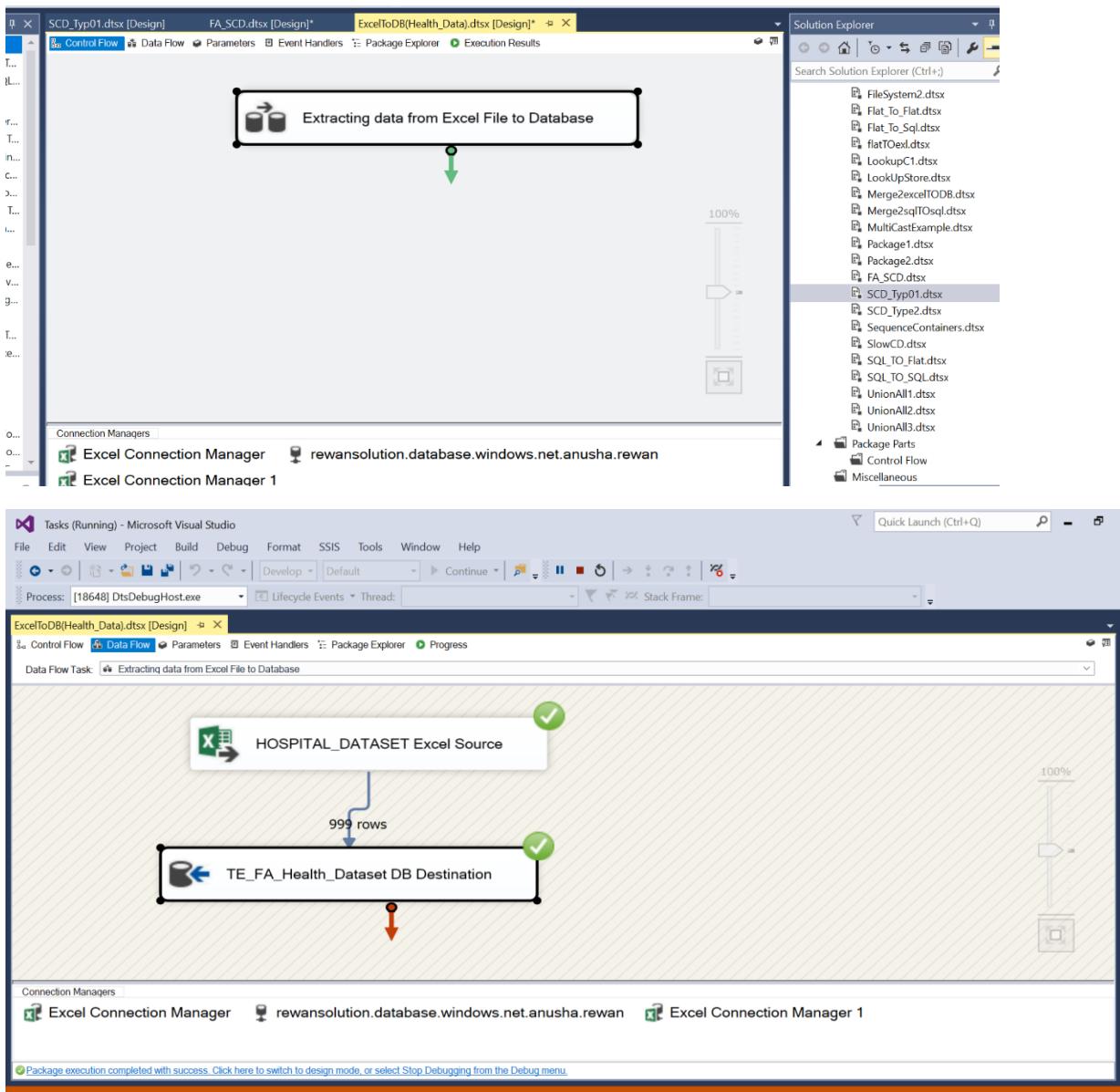
-----EXTRACTING DATA FROM HEALTH RECORD-----

```
=CREATE TABLE TE_FA_HEALTH_DATASET(
    [PID] float,
    [AGE] float,
    [GENDER] nvarchar(255),
    [CASTE_NAME] nvarchar(255),
    [CATEGORY_CODE] nvarchar(255),
    [CATEGORY_NAME] nvarchar(255),
    [SURGERY_DATE] datetime,
    [DISCHARGE_DATE] datetime,
    [VILLAGE] nvarchar(255),
    [MANDAL_NAME] nvarchar(255),
    [DISTRICT_NAME] nvarchar(255),
    [PREAUTH_DATE] datetime,
    [PREAUTH_AMT] float,
    [CLAIM_DATE] datetime,
    [CLAIM_AMOUNT] float,
    [HOSP_NAME] nvarchar(255),
    [HOSP_TYPE] nvarchar(255),
    [HOSP_DISTRICT] nvarchar(255),
    [MORTALITY] nvarchar(255),
    [MORTALITY_DATE] datetime,
    [SRC_REGISTRATION] nvarchar(255)
);
```

c) Drag and drop destination as OLE DB and selecting the destination table



d) Save and run package

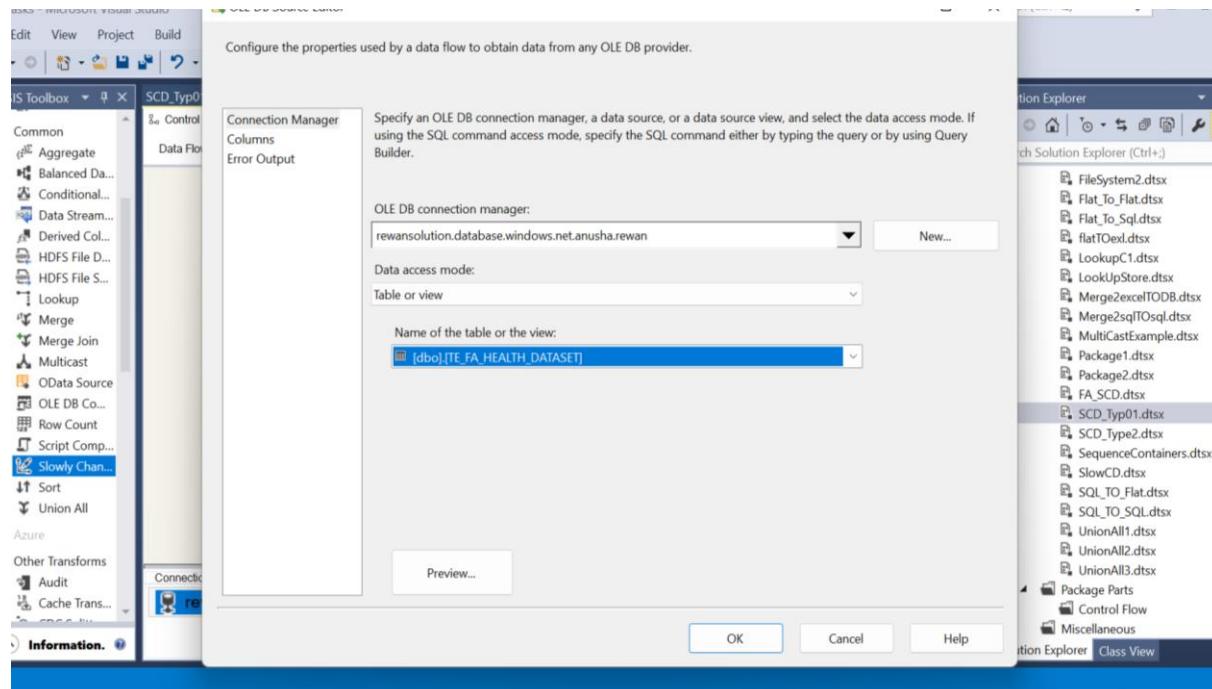


e) Destination table results

	PID	AGE	GENDER	CASTE_NAME	CATEGORY_CODE	CATEGORY_NAME	SURGERY_DATE	DISCHARGE_DATE	VILLAGE
1	56	Female	BC	M6	NEPHROLOGY	2013-08-06 00:00:00.000	2013-09-07 00:00:00.000	Lolugu	
2	2	37	Male	BC	M6	NEPHROLOGY	2013-08-08 00:00:00.000	2013-09-09 00:00:00.000	Borivanka
3	3	50	Male	BC	M6	NEPHROLOGY	2013-08-15 00:00:00.000	2013-10-18 00:00:00.000	Kapasakuddi
4	4	45	Male	BC	M6	NEPHROLOGY	2013-08-24 00:00:00.000	2013-09-27 00:00:00.000	Telikipenta
5	5	54	Male	BC	M6	NEPHROLOGY	2013-08-31 00:00:00.000	2013-10-02 00:00:00.000	Thandemvalas
6	6	35	Male	OC	M6	NEPHROLOGY	2013-08-31 00:00:00.000	2013-10-02 00:00:00.000	Phasiganguve
7	7	52	Male	OC	M6	NEPHROLOGY	2013-08-31 00:00:00.000	2013-10-02 00:00:00.000	Kranti Nagar
8	8	73	Male	BC	M6	NEPHROLOGY	2014-05-05 00:00:00.000	[NULL]	Bhogapuram
9	9	56	Male	OC	S7	CARDIAC AND CARDIOT	2014-06-14 00:00:00.000	2014-06-16 00:00:00.000	Vallur
10	10	49	Male	OC	S7	CARDIAC AND CARDIOT	2014-06-17 00:00:00.000	2014-06-25 00:00:00.000	Ward-15
11	11	52	Male	BC	M6	NEPHROLOGY	2014-06-27 00:00:00.000	[NULL]	Rajam
12	12	56	Male	SC	M5	CARDIOLOGY	2014-07-04 00:00:00.000	2014-07-09 00:00:00.000	Thurlapadu
13	13	65	Female	SC	M5	CARDIOLOGY	2014-07-08 00:00:00.000	2014-07-16 00:00:00.000	Pulipadu
14	14	75	Male	OC	M5	CARDIOLOGY	2014-07-10 00:00:00.000	2014-07-19 00:00:00.000	Karlapalem
15	15	52	Male	OC	M5	CARDIOLOGY	2014-07-13 00:00:00.000	2014-07-19 00:00:00.000	Ward-19
16	16	56	Male	Minorities	M5	CARDIOLOGY	2014-07-15 00:00:00.000	2014-07-21 00:00:00.000	Tullur
17	17	1	Male(Child)	OC	S16	COCHLEAR IMPLANT SU	2017-08-16 00:00:00.000	2017-08-17 00:00:00.000	Phirangipuran
18	18	54	Female	SC	S7	CARDIAC AND CARDIOT	2014-07-29 00:00:00.000	2014-08-08 00:00:00.000	Kolakalur
19	19	48	Male	OC	S7	CARDIAC AND CARDIOT	2014-07-28 00:00:00.000	2014-08-06 00:00:00.000	Vellalur
20	20	57	Female	OC	M5	CARDIOLOGY	2014-07-27 00:00:00.000	2014-08-02 00:00:00.000	Phirangipuran

2) Slowly Changing Dimension -Type 0

a) Create data flow task and select OLE DB as source and select source table

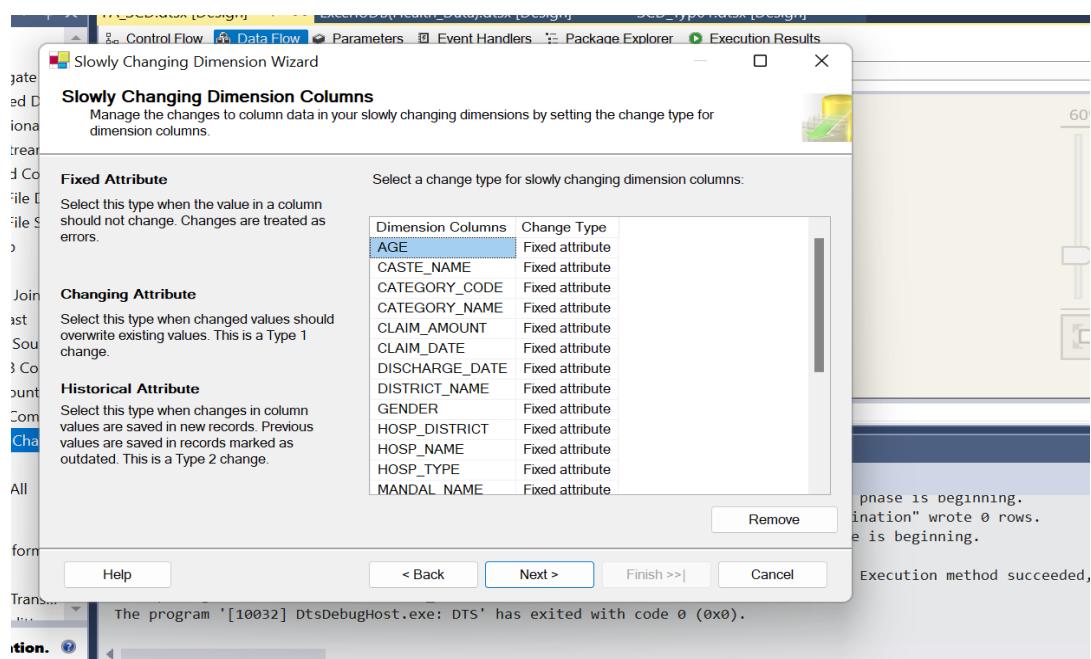


b) Create destination table

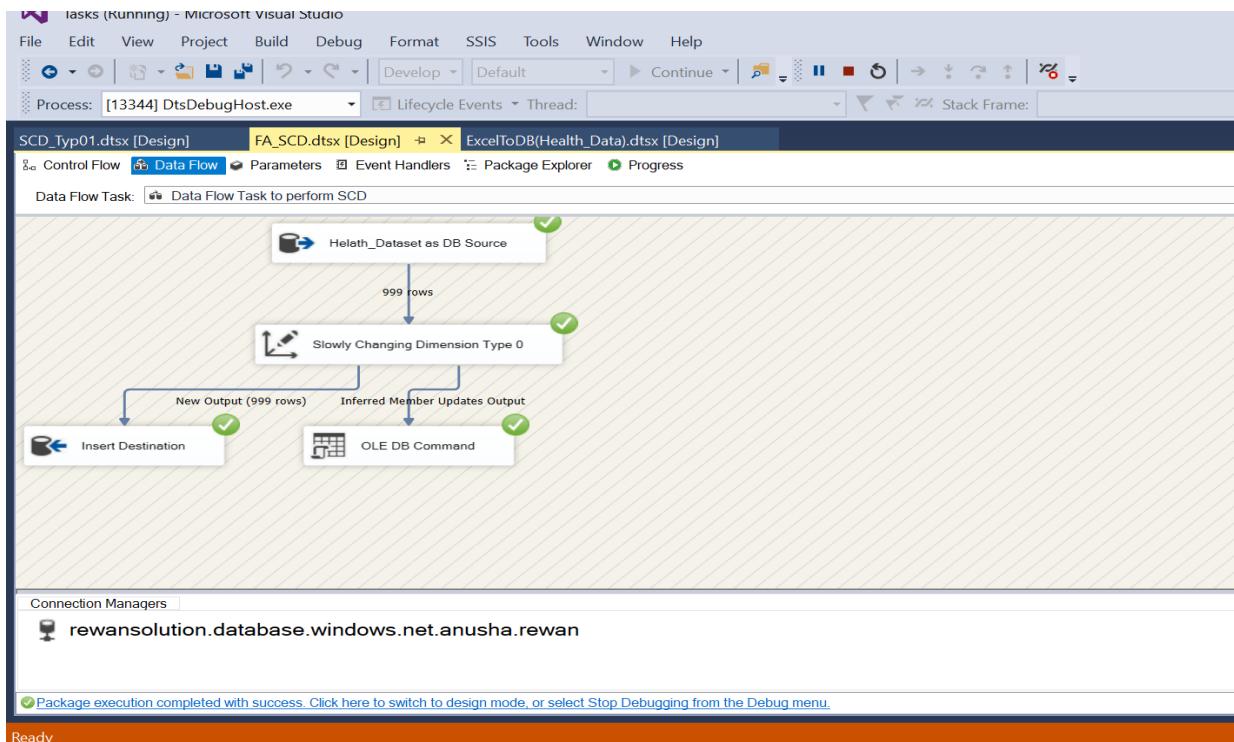
```
CREATE TABLE TE_FA_HEALTH_DATA_DEST(
    [PID] float,
    [AGE] float,
    [GENDER] nvarchar(255),
    [CASTE_NAME] nvarchar(255),
    [CATEGORY_CODE] nvarchar(255),
    [CATEGORY_NAME] nvarchar(255),
    [SURGERY_DATE] datetime,
    [DISCHARGE_DATE] datetime,
    [VILLAGE] nvarchar(255),
    [MANDAL_NAME] nvarchar(255),
    [DISTRICT_NAME] nvarchar(255),
    [PREAUTH_DATE] datetime,
    [PREAUTH_AMT] float,
    [CLAIM_DATE] datetime,
    [CLAIM_AMOUNT] float,
    [HOSP_NAME] nvarchar(255),
    [HOSP_TYPE] nvarchar(255),
    [HOSP_DISTRICT] nvarchar(255),
    [MORTALITY] nvarchar(255),
    [MORTALITY_DATE] datetime,
    [SRC_REGISTRATION] nvarchar(255)
);
```

c) Drag and drop SCD and setup the destination table

d) change every column as fixed attribute



e) Save and run task



f) Data is inserted to destination table

The screenshot shows the SQL Server Management Studio (SSMS) interface. The query window contains the following SQL code:

```
SELECT * FROM TE_FA_HEALTH_DATA_DEST;
```

The results window titled "Results 1" displays the data from the "TE_FA_HEALTH_DATA_DEST" table. The table structure is as follows:

	PID	AGE	GENDER	CASTE_NAME	CATEGORY_CODE	CATEGORY_NAME	SURGERY_DATE	DISCHARGE_DATE	VILLAGE
1	1	56	Female	BC	M6	NEPHROLOGY	2013-08-06 00:00:00.000	2013-09-07 00:00:00.000	Lolugu
2	2	37	Male	BC	M6	NEPHROLOGY	2013-08-08 00:00:00.000	2013-09-09 00:00:00.000	Borivanka
3	3	50	Male	BC	M6	NEPHROLOGY	2013-08-15 00:00:00.000	2013-10-18 00:00:00.000	Kapasakuddi
4	4	45	Male	BC	M6	NEPHROLOGY	2013-08-24 00:00:00.000	2013-09-27 00:00:00.000	Telikipenta
5	5	54	Male	BC	M6	NEPHROLOGY	2013-08-31 00:00:00.000	2013-10-02 00:00:00.000	Thandemvalas
6	6	35	Male	OC	M6	NEPHROLOGY	2013-08-31 00:00:00.000	2013-10-02 00:00:00.000	Phasigangupe
7	7	52	Male	OC	M6	NEPHROLOGY	2013-08-31 00:00:00.000	2013-10-02 00:00:00.000	Kranti Nagar
8	8	73	Male	BC	M6	NEPHROLOGY	2014-05-05 00:00:00.000	[NULL]	Bhogapuram
9	9	56	Male	OC	S7	CARDIAC AND CARDIOT	2014-06-14 00:00:00.000	2014-06-16 00:00:00.000	Valur
10	10	49	Male	OC	S7	CARDIAC AND CARDIOT	2014-06-17 00:00:00.000	2014-06-25 00:00:00.000	Ward-15
11	11	52	Male	BC	M6	NEPHROLOGY	2014-06-27 00:00:00.000	[NULL]	Rajam
12	12	56	Male	SC	M5	CARDIOLOGY	2014-07-04 00:00:00.000	2014-07-09 00:00:00.000	Thurlapadu
13	13	65	Female	SC	M5	CARDIOLOGY	2014-07-08 00:00:00.000	2014-07-16 00:00:00.000	Pulipadu
14	14	75	Male	OC	M5	CARDIOLOGY	2014-07-10 00:00:00.000	2014-07-19 00:00:00.000	Karlappalem
15	15	52	Male	OC	M5	CARDIOLOGY	2014-07-13 00:00:00.000	2014-07-19 00:00:00.000	Ward-19
16	16	56	Male	Minorities	M5	CARDIOLOGY	2014-07-15 00:00:00.000	2014-07-21 00:00:00.000	Tullur
17	17	1	Male(Child)	OC	S16	COCHLEAR IMPLANT SU	2017-08-16 00:00:00.000	2017-08-17 00:00:00.000	Phirangipuram
18	18	54	Female	SC	S7	CARDIAC AND CARDIOT	2014-07-29 00:00:00.000	2014-08-08 00:00:00.000	Kolakkalur
19	19	48	Male	OC	S7	CARDIAC AND CARDIOT	2014-07-28 00:00:00.000	2014-08-06 00:00:00.000	Vellalur

At the bottom of the results window, there are buttons for Save, Cancel, Script, and other options. The status bar at the bottom right shows "0:29 PM".

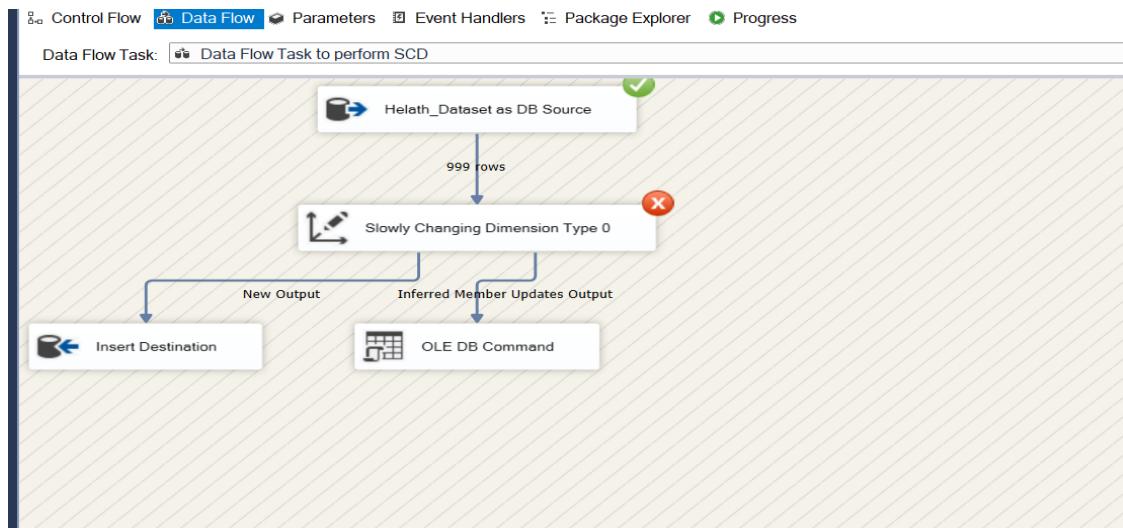
g) Updating column in source table

```
SELECT * FROM TE_FA_HEALTH_DATA_DEST;
---TYPE 0 UPDATING COLUMN CASTE_NAME IN SOURCE TABLE---

UPDATE TE_FA_HEALTH_DATASET SET CASTE_NAME='Minorities' WHERE PID=1;

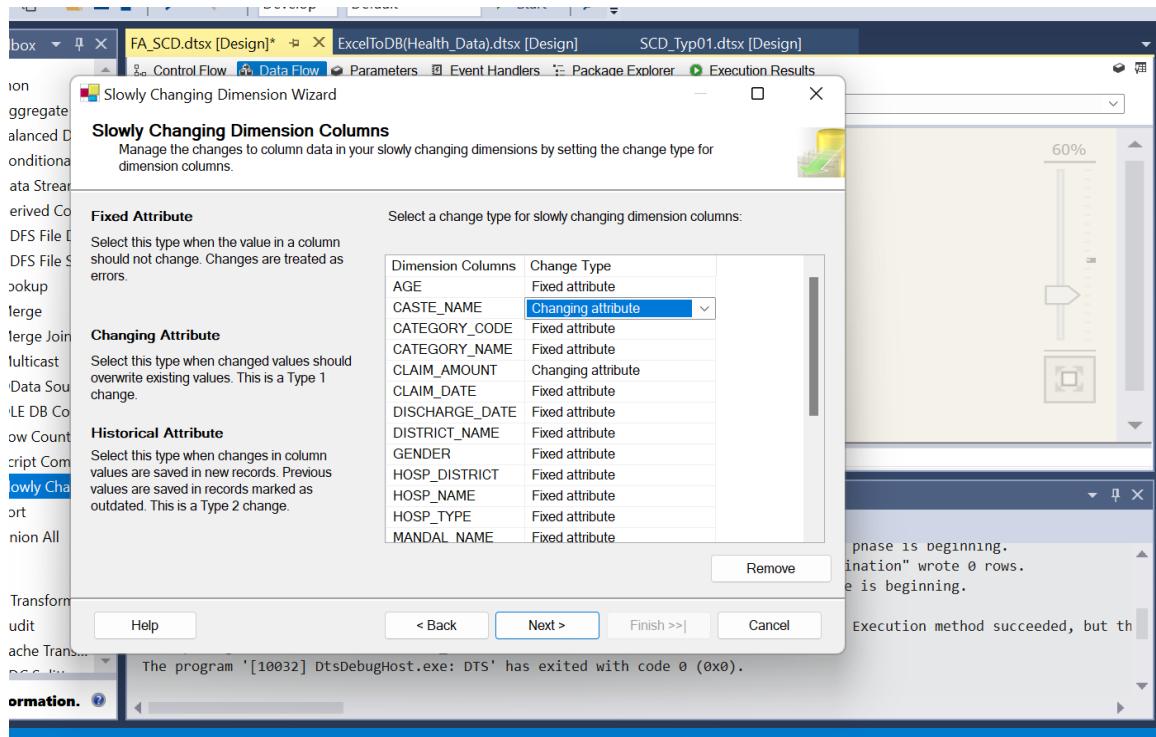
Results 1 x
SELECT * FROM TE_FA_HEALTH_DATASET Enter a SQL expression to filter results (use Ctrl+Space)
Grid
123 PID 123 AGE % GENDER % CASTE NAME % CATEGORY_CODE % CATEGORY NAME % SURGERY_DATE % DISCHARGE_DATE %
Text
Record
1 1 56 Female Minorities M6 NEPHROLOGY 2013-08-06 00:00:00.000 2013-09-07 00:00:00.000
2 2 37 Male BC M6 NEPHROLOGY 2013-08-08 00:00:00.000 2013-09-09 00:00:00.000
3 3 50 Male BC M6 NEPHROLOGY 2013-08-15 00:00:00.000 2013-10-18 00:00:00.000
4 4 45 Male BC M6 NEPHROLOGY 2013-08-24 00:00:00.000 2013-09-27 00:00:00.000
5 5 54 Male BC M6 NEPHROLOGY 2013-08-31 00:00:00.000 2013-10-02 00:00:00.000
6 6 35 Male OC M6 NEPHROLOGY 2013-08-31 00:00:00.000 2013-10-02 00:00:00.000
7 7 52 Male OC M6 NEPHROLOGY 2013-08-31 00:00:00.000 2013-10-02 00:00:00.000
8 8 73 Male BC M6 NEPHROLOGY 2014-05-05 00:00:00.000
9 9 56 Male OC S7 CARDIAC AND CARDIOTHORACIC SURGERY 2014-06-14 00:00:00.000 2014-06-16 00:00:00.000
10 10 49 Male OC S7 CARDIAC AND CARDIOTHORACIC SURGERY 2014-06-17 00:00:00.000 2014-06-25 00:00:00.000
```

h) Run SCD 0 again it will throw error because the columns are fixed attribute

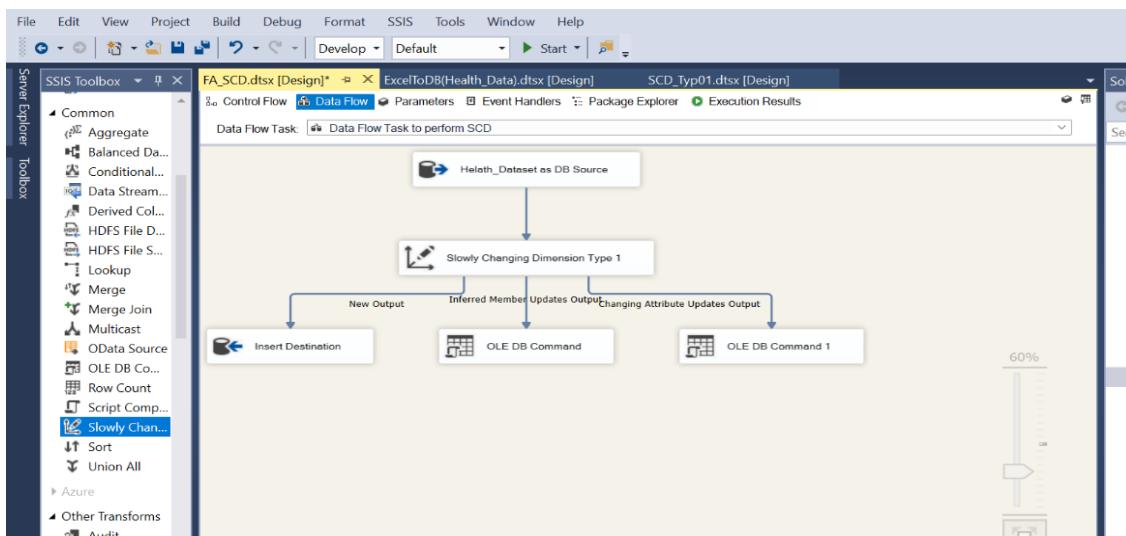


Slowly Changing Dimension Type -1

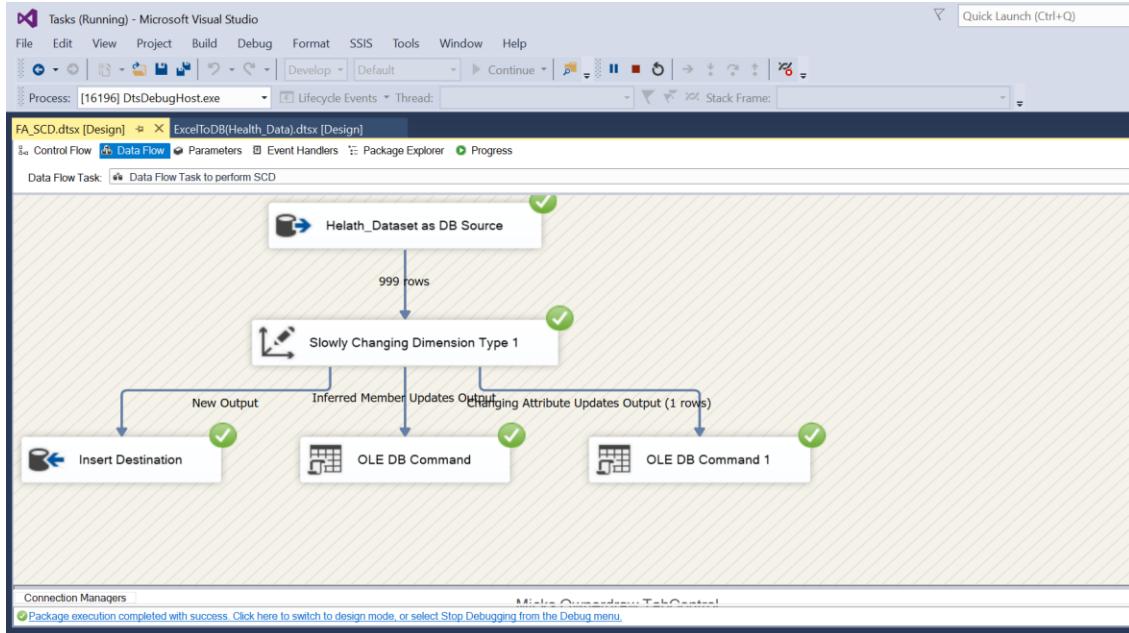
a) Double click SCD transformation and change desired columns to changing attributes.



b) Overview of dataflow



c) Save and run task 1 row will be updated



d) Destination table with updated result

	PID	AGE	GENDER	CASTE_NAME	CATEGORY_CODE	CATEGORY_NAME	SURGERY_DATE	DISCHARGE_DATE
1	1	56	Female	Minorities	M6	NEPHROLOGY	2013-08-06 00:00:00.000	2013-09-07 00:00:00
2	2	37	Male	BC	M6	NEPHROLOGY	2013-08-08 00:00:00.000	2013-09-09 00:00:00
3	3	50	Male	BC	M6	NEPHROLOGY	2013-08-15 00:00:00.000	2013-10-18 00:00:00
4	4	45	Male	BC	M6	NEPHROLOGY	2013-08-24 00:00:00.000	2013-09-27 00:00:00
5	5	54	Male	BC	M6	NEPHROLOGY	2013-08-31 00:00:00.000	2013-10-02 00:00:00
6	6	35	Male	OC	M6	NEPHROLOGY	2013-08-31 00:00:00.000	2013-10-02 00:00:00
7	7	52	Male	OC	M6	NEPHROLOGY	2013-08-31 00:00:00.000	2013-10-02 00:00:00
8	8	73	Male	BC	M6	NEPHROLOGY	2014-05-05 00:00:00.000	
9	9	56	Male	OC	S7	CARDIAC AND CARDIOTHORACIC SURGERY	2014-06-14 00:00:00.000	2014-06-16 00:00:00
10	10	49	Male	OC	S7	CARDIAC AND CARDIOTHORACIC SURGERY	2014-06-17 00:00:00.000	2014-06-25 00:00:00
11	11	52	Male	BC	M6	NEPHROLOGY	2014-06-27 00:00:00.000	
12	12	56	Male	SC	M5	CARDIOLOGY	2014-07-04 00:00:00.000	2014-07-09 00:00:00
13	13	65	Female	SC	M5	CARDIOLOGY	2014-07-08 00:00:00.000	2014-07-16 00:00:00
14	14	75	Male	OC	M5	CARDIOLOGY	2014-07-10 00:00:00.000	2014-07-19 00:00:00
15	15	52	Male	OC	M5	CARDIOLOGY	2014-07-13 00:00:00.000	2014-07-19 00:00:00
16	16	56	Male	Minorities	M5	CARDIOLOGY	2014-07-15 00:00:00.000	2014-07-21 00:00:00
17	17	1	Male(Child)	OC	S16	COCHLEAR IMPLANT SURGERY	2017-08-16 00:00:00.000	2017-08-17 00:00:00
18	18	54	Female	SC	S7	CARDIAC AND CARDIOTHORACIC SURGERY	2014-07-29 00:00:00.000	2014-08-08 00:00:00
19	19	48	Male	OC	S7	CARDIAC AND CARDIOTHORACIC SURGERY	2014-07-28 00:00:00.000	2014-08-06 00:00:00
20	20	57	Female	OC	M5	CARDIOLOGY	2014-07-27 00:00:00.000	2014-08-02 00:00:00

Slowly Changing Dimension -Type 2

a) Add new columns to source and destination

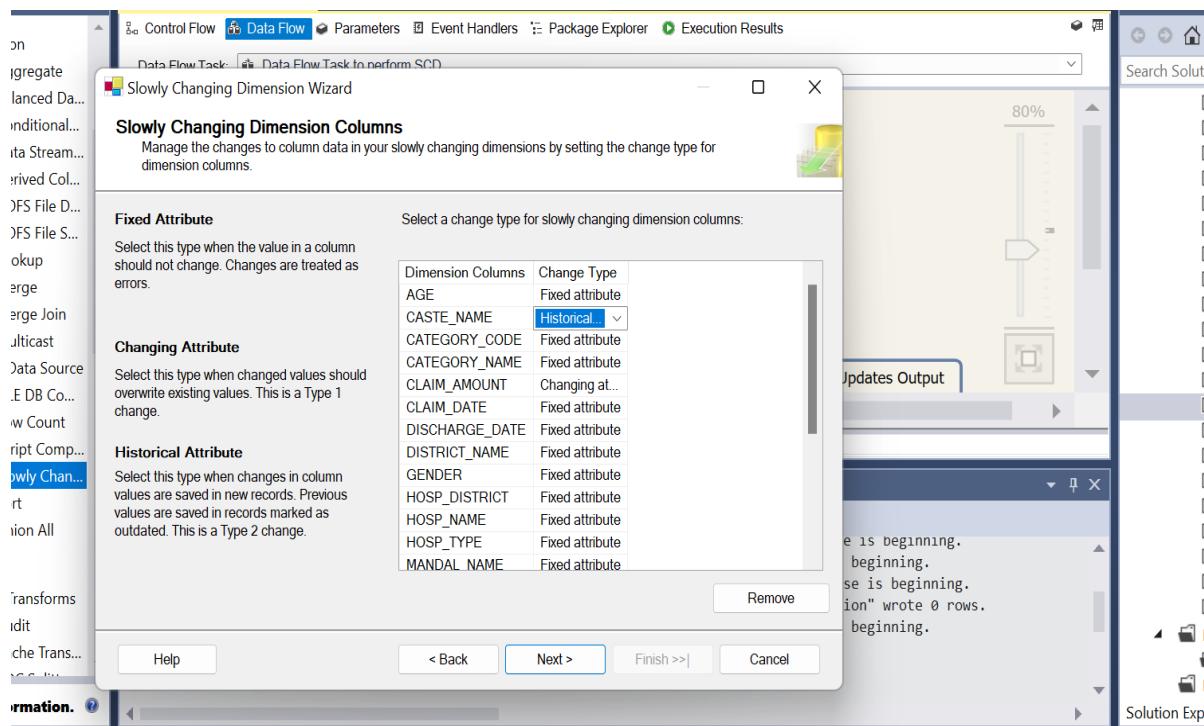
---TYPE 3 ---HISTORICAL ATTRIBUTE---

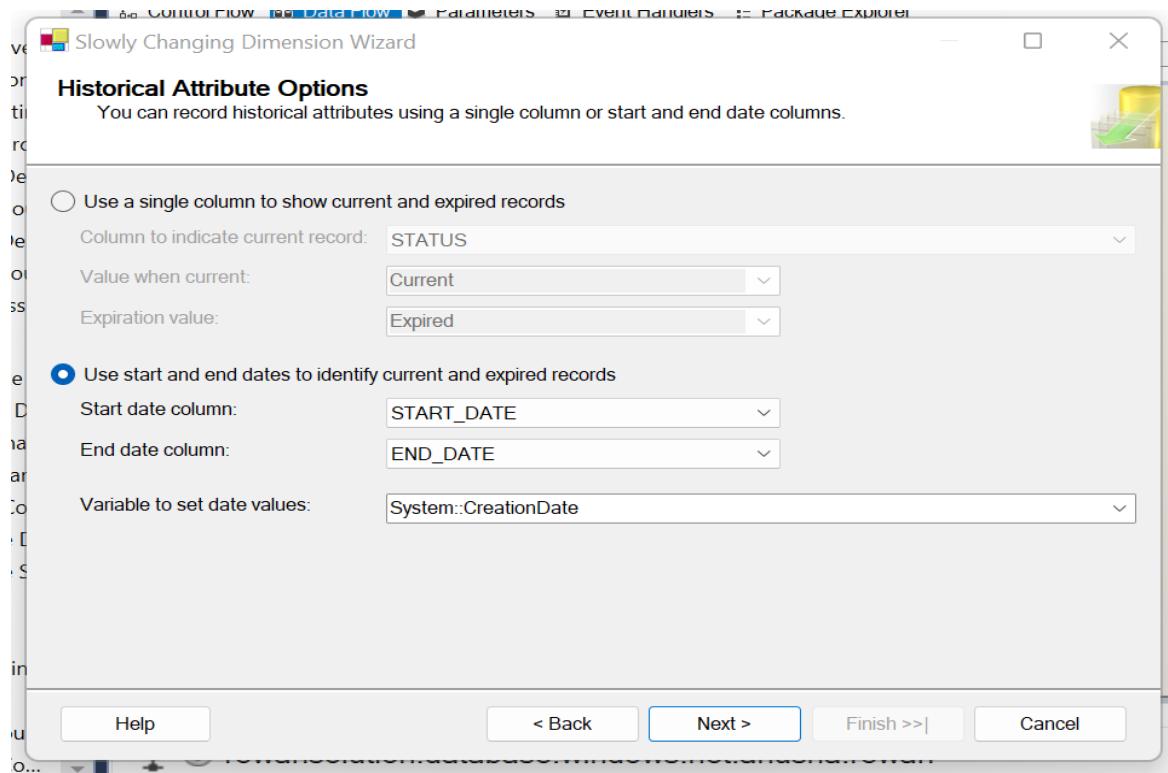
```
ALTER TABLE TE_FA_HEALTH_DATASET ADD START_DATE DATE, END_DATE DATE, STATUS VARCHAR(10);
SELECT * FROM TE_FA_HEALTH_DATASET;
```

Results 1 ×

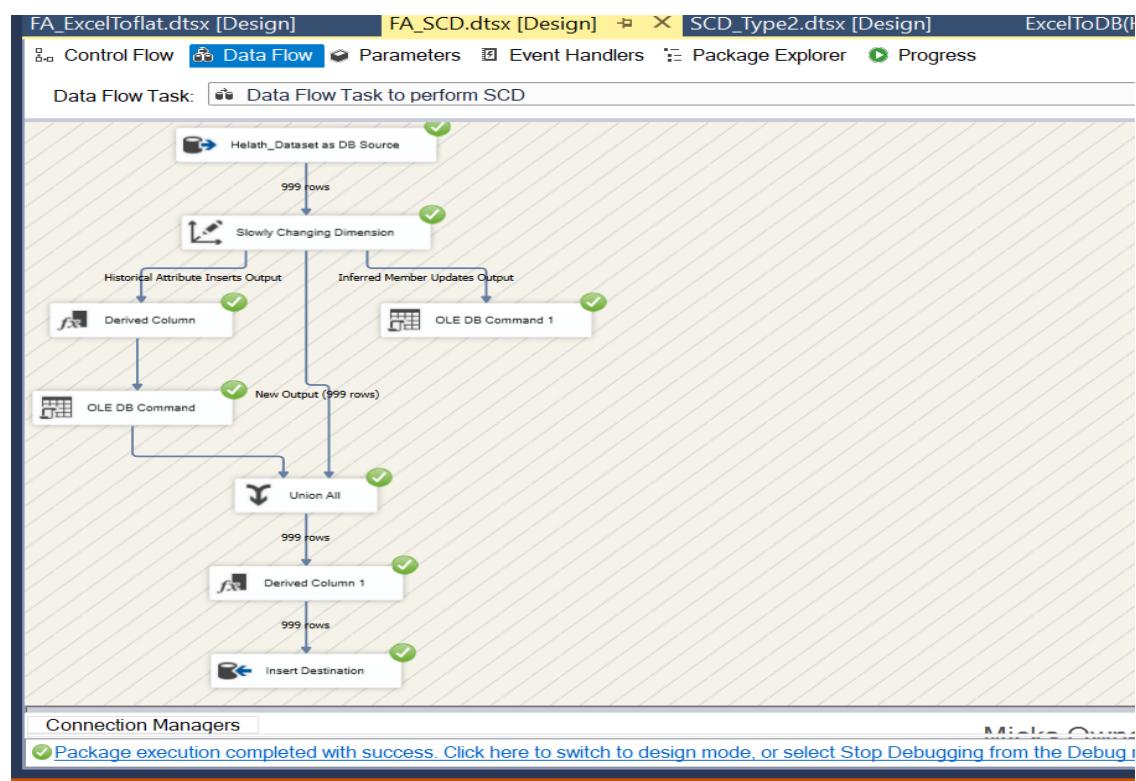
	HOSP_TYPE	HOSP_DISTRICT	MORTALITY	MORTALITY_DATE	SRC_REGISTRATION	START_DATE	END_DATE	STATUS
1	Srikakulam	NO	[NULL]	D	[NULL]	[NULL]	[NULL]	[NULL]
2	Srikakulam	NO	[NULL]	D	[NULL]	[NULL]	[NULL]	[NULL]
3	Srikakulam	NO	[NULL]	D	[NULL]	[NULL]	[NULL]	[NULL]
4	Srikakulam	NO	[NULL]	D	[NULL]	[NULL]	[NULL]	[NULL]
5	Srikakulam	NO	[NULL]	D	[NULL]	[NULL]	[NULL]	[NULL]
6	Srikakulam	NO	[NULL]	P	[NULL]	[NULL]	[NULL]	[NULL]
7	Kurnool	NO	[NULL]	D	[NULL]	[NULL]	[NULL]	[NULL]
8	Vishakhapatnam	YES	2014-05-23 00:00:00.000	D	[NULL]	[NULL]	[NULL]	[NULL]
9	Guntur	NO	[NULL]	D	[NULL]	[NULL]	[NULL]	[NULL]
10	Guntur	NO	[NULL]	D	[NULL]	[NULL]	[NULL]	[NULL]
11	Vishakhapatnam	YES	2014-07-16 00:00:00.000	P	[NULL]	[NULL]	[NULL]	[NULL]
12	NO							

b) Change desired column as historical attributes and select the dates





c) Save and run task



d) The results of destination table

SELECT * FROM TE_FA_HEALTH_DATA_DEST;

Results 1 ×

Enter a SQL expression to filter results (use Ctrl+Space)

	PID	AGE	GENDER	CASTE_NAME	CATEGORY_CODE	CATEGORY_NAME	SURGERY_DATE	DISCH_DATE
Grid	1	56	Female	Minorities	M111	NEPHROLOGY	2013-08-06 00:00:00.000	2013-09
Text	2	37	Male	Minorities	M111	NEPHROLOGY	2013-08-08 00:00:00.000	2013-09
Text	3	50	Male	BC	M111	NEPHROLOGY	2013-08-15 00:00:00.000	2013-10
Text	4	45	Male	BC	M111	NEPHROLOGY	2013-08-24 00:00:00.000	2013-09
Text	5	54	Male	BC	M111	NEPHROLOGY	2013-08-31 00:00:00.000	2013-10
Text	6	35	Male	OC	M111	NEPHROLOGY	2013-08-31 00:00:00.000	2013-10
Text	7	52	Male	OC	M111	NEPHROLOGY	2013-08-31 00:00:00.000	2013-10
Text	8	73	Male	BC	M111	NEPHROLOGY	2014-05-05 00:00:00.000	
Text	9	56	Male	OC	S7	CARDIAC AND CARDIOTHORACIC SURGERY	2014-06-14 00:00:00.000	2014-06
Text	10	49	Male	OC	S7	CARDIAC AND CARDIOTHORACIC SURGERY	2014-06-17 00:00:00.000	2014-06
Text	11	52	Male	BC	M111	NEPHROLOGY	2014-06-27 00:00:00.000	
Text	12	56	Male	SC	M5	CARDIOLOGY	2014-07-04 00:00:00.000	2014-07
Text	13	65	Female	SC	M5	CARDIOLOGY	2014-07-08 00:00:00.000	2014-07
Text	14	75	Male	OC	M5	CARDIOLOGY	2014-07-10 00:00:00.000	2014-07
Text	15	52	Male	OC	M5	CARDIOLOGY	2014-07-13 00:00:00.000	2014-07
Text	16	56	Male	Minorities	M5	CARDIOLOGY	2014-07-15 00:00:00.000	2014-07
Text	17	1	Male(Child)	OC	S16	COCHLEAR IMPLANT SURGERY	2017-08-16 00:00:00.000	2017-08
Text	18	54	Female	SC	S7	CARDIAC AND CARDIOTHORACIC SURGERY	2014-07-29 00:00:00.000	2014-08
Text	19	48	Male	OC	S7	CARDIAC AND CARDIOTHORACIC SURGERY	2014-07-28 00:00:00.000	2014-08

1435
1995
94-
Text
Record

Results 1 ×

SELECT * FROM TE_FA_HEALTH_DATA_DEST;

Enter a SQL expression to filter results (use Ctrl+Space)

	HOSP_TYPE	HOSP_DISTRICT	MORTALITY	MORTALITY_DATE	SRC_REGISTRATION	START_DATE	END_DATE	STATUS
1	G	Srikakulam	NO	[NULL]	D	2022-10-05	[NULL]	[NULL]
2	G	Srikakulam	NO	[NULL]	D	2022-10-05	[NULL]	[NULL]
3	G	Srikakulam	NO	[NULL]	D	2022-10-05	[NULL]	[NULL]
4	G	Srikakulam	NO	[NULL]	D	2022-10-05	[NULL]	[NULL]
5	G	Srikakulam	NO	[NULL]	D	2022-10-05	[NULL]	[NULL]
6	G	Srikakulam	NO	[NULL]	P	2022-10-05	[NULL]	[NULL]
7	G	Kurnool	NO	[NULL]	D	2022-10-05	[NULL]	[NULL]
8	C	Vishakhapatnam	YES	014-05-23 00:00:00.000	D	2022-10-05	[NULL]	[NULL]
9	C	Guntur	NO	[NULL]	D	2022-10-05	[NULL]	[NULL]
10	C	Guntur	NO	[NULL]	D	2022-10-05	[NULL]	[NULL]
11	C	Vishakhapatnam	YES	014-07-16 00:00:00.000	P	2022-10-05	[NULL]	[NULL]
12	C	Guntur	NO	[NULL]	D	2022-10-05	[NULL]	[NULL]
13	C	Guntur	NO	[NULL]	P	2022-10-05	[NULL]	[NULL]
14	C	Guntur	NO	[NULL]	D	2022-10-05	[NULL]	[NULL]
15	C	Guntur	NO	[NULL]	D	2022-10-05	[NULL]	[NULL]
16	C	Guntur	NO	[NULL]	D	2022-10-05	[NULL]	[NULL]
17	C	Guntur	NO	[NULL]	D	2022-10-05	[NULL]	[NULL]
18	C	Guntur	NO	[NULL]	D	2022-10-05	[NULL]	[NULL]
19	C	Guntur	NO	[NULL]	D	2022-10-05	[NULL]	[NULL]

e) Update column in source dataset

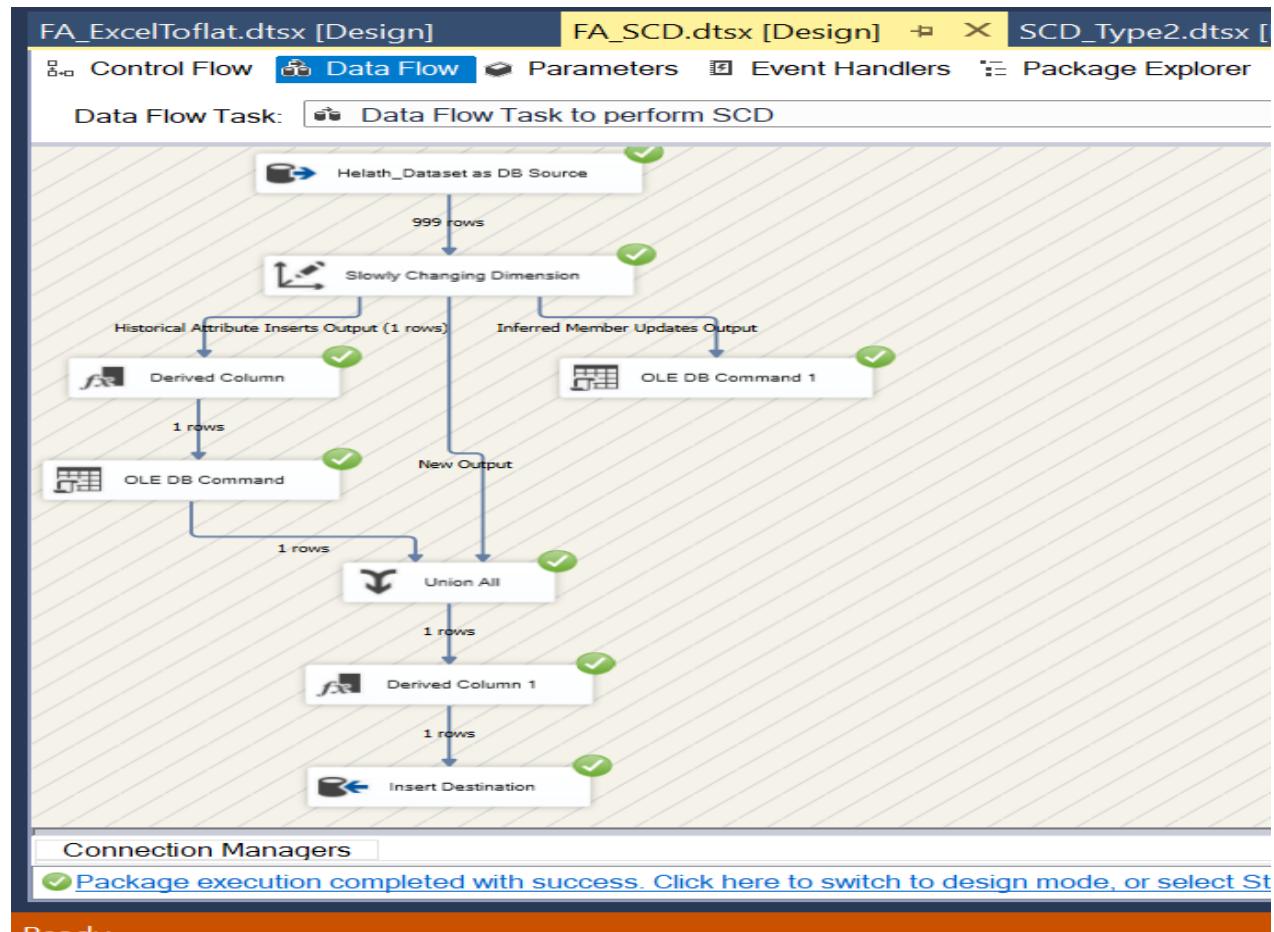
```

    UPDATE TE_FA_HEALTH_DATASET SET CASTE_NAME = 'OBC' WHERE PID=1;
    SELECT * FROM TE_FA_HEALTH_DATASET;
  
```

The screenshot shows the results of the update query. A new row has been added with PID 1433, GENDER 'Male', and CASTE_NAME 'Minorities'. The rest of the data remains the same.

	PID	AGE	GENDER	CASTE_NAME	CATEGORY_CODE	CATEGORY_NAME	SURGERY_DATE	DISCHARGE_DATE
1	1	56	Female	OBC	M111	NEPHROLOGY	2013-08-06 00:00:00.000	2013-09-07
2	2	37	Male	Minorities	M111	NEPHROLOGY	2013-08-08 00:00:00.000	2013-09-09
3	3	50	Male	BC	M111	NEPHROLOGY	2013-08-15 00:00:00.000	2013-10-18
4	4	45	Male	BC	M111	NEPHROLOGY	2013-08-24 00:00:00.000	2013-09-27
5	5	54	Male	BC	M111	NEPHROLOGY	2013-08-31 00:00:00.000	2013-10-02
6	6	35	Male	OC	M111	NEPHROLOGY	2013-08-31 00:00:00.000	2013-10-02
7	7	52	Male	OC	M111	NEPHROLOGY	2013-08-31 00:00:00.000	2013-10-02
8	8	73	Male	BC	M111	NEPHROLOGY	2014-05-05 00:00:00.000	
9	9	56	Male	OC	S7	CARDIAC AND CARDIOTHORACIC SURGERY	2014-06-14 00:00:00.000	2014-06-16
10	10	49	Male	OC	S7	CARDIAC AND CARDIOTHORACIC SURGERY	2014-06-17 00:00:00.000	2014-06-25
11	11	52	Male	BC	M111	NEPHROLOGY	2014-06-27 00:00:00.000	
12	12	56	Male	SC	M5	CARDIOLOGY	2014-07-04 00:00:00.000	2014-07-09
13	13	65	Female	SC	M5	CARDIOLOGY	2014-07-08 00:00:00.000	2014-07-16
14	14	75	Male	OC	M5	CARDIOLOGY	2014-07-10 00:00:00.000	2014-07-19
15	15	52	Male	OC	M5	CARDIOLOGY	2014-07-13 00:00:00.000	2014-07-19
	45	EG	Male	Minorities	MAE	CARDIOLOGY	2014-07-15 00:00:00.000	2014-07-24

f) Run the task again one row is updated and new record is inserted



g) Destination table result

```
435  
99:  
M-  
  
UPDATE TE_FA_HEALTH_DATASET SET CASTE_NAME ='OBC' WHERE PID=1;  
  
SELECT * FROM TE_FA_HEALTH_DATASET;  
  
SELECT * FROM TE_FA_HEALTH_DATA_DEST;  
  
  

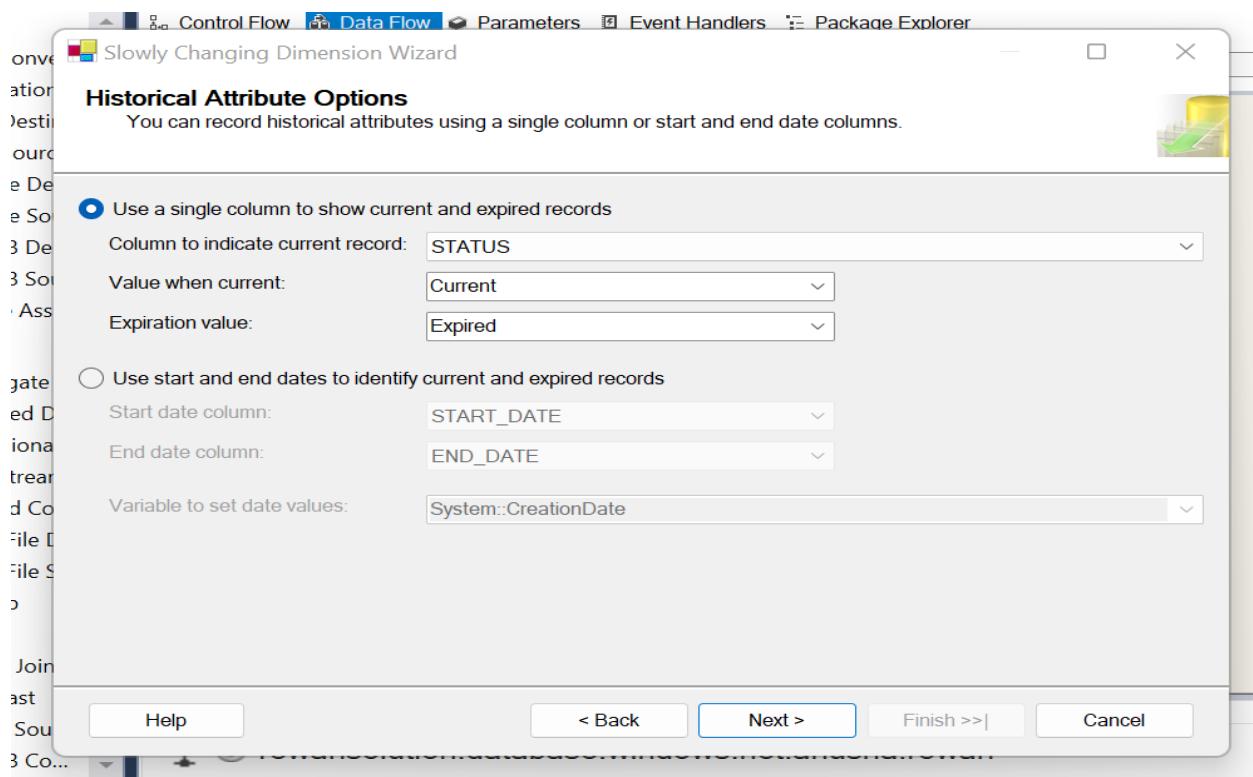

| Results 1 ×                                                                                                   |     |     |        |            |               |                                    |            |            |      |
|---------------------------------------------------------------------------------------------------------------|-----|-----|--------|------------|---------------|------------------------------------|------------|------------|------|
| SELECT * FROM TE_FA_HEALTH_DATA_DEST <small>Enter a SQL expression to filter results (use Ctrl+Space)</small> |     |     |        |            |               |                                    |            |            |      |
|                                                                                                               | PID | AGE | GENDER | CASTE_NAME | CATEGORY_CODE | CATEGORY_NAME                      | START_DATE | END_DATE   | SI   |
| 1                                                                                                             | 1   | 56  | Female | OBC        | M111          | NEPHROLOGY                         | 2022-10-05 | 2022-10-05 | 201: |
| 2                                                                                                             | 1   | 56  | Female | Minorities | M111          | NEPHROLOGY                         | 2022-10-05 | 2022-10-05 | 201: |
| 3                                                                                                             | 2   | 37  | Male   | Minorities | M111          | NEPHROLOGY                         | 2022-10-05 | [NULL]     | 201: |
| 4                                                                                                             | 3   | 50  | Male   | BC         | M111          | NEPHROLOGY                         | 2022-10-05 | [NULL]     | 201: |
| 5                                                                                                             | 4   | 45  | Male   | BC         | M111          | NEPHROLOGY                         | 2022-10-05 | [NULL]     | 201: |
| 6                                                                                                             | 5   | 54  | Male   | BC         | M111          | NEPHROLOGY                         | 2022-10-05 | [NULL]     | 201: |
| 7                                                                                                             | 6   | 35  | Male   | OC         | M111          | NEPHROLOGY                         | 2022-10-05 | [NULL]     | 201: |
| 8                                                                                                             | 7   | 52  | Male   | OC         | M111          | NEPHROLOGY                         | 2022-10-05 | [NULL]     | 201: |
| 9                                                                                                             | 8   | 73  | Male   | BC         | M111          | NEPHROLOGY                         | 2022-10-05 | [NULL]     | 201: |
| 10                                                                                                            | 9   | 56  | Male   | OC         | S7            | CARDIAC AND CARDIOTHORACIC SURGERY | 2022-10-05 | [NULL]     | 201: |
| 11                                                                                                            | 10  | 49  | Male   | OC         | S7            | CARDIAC AND CARDIOTHORACIC SURGERY | 2022-10-05 | [NULL]     | 201: |
| 12                                                                                                            | 11  | 52  | Male   | BC         | M111          | NEPHROLOGY                         | 2022-10-05 | [NULL]     | 201: |

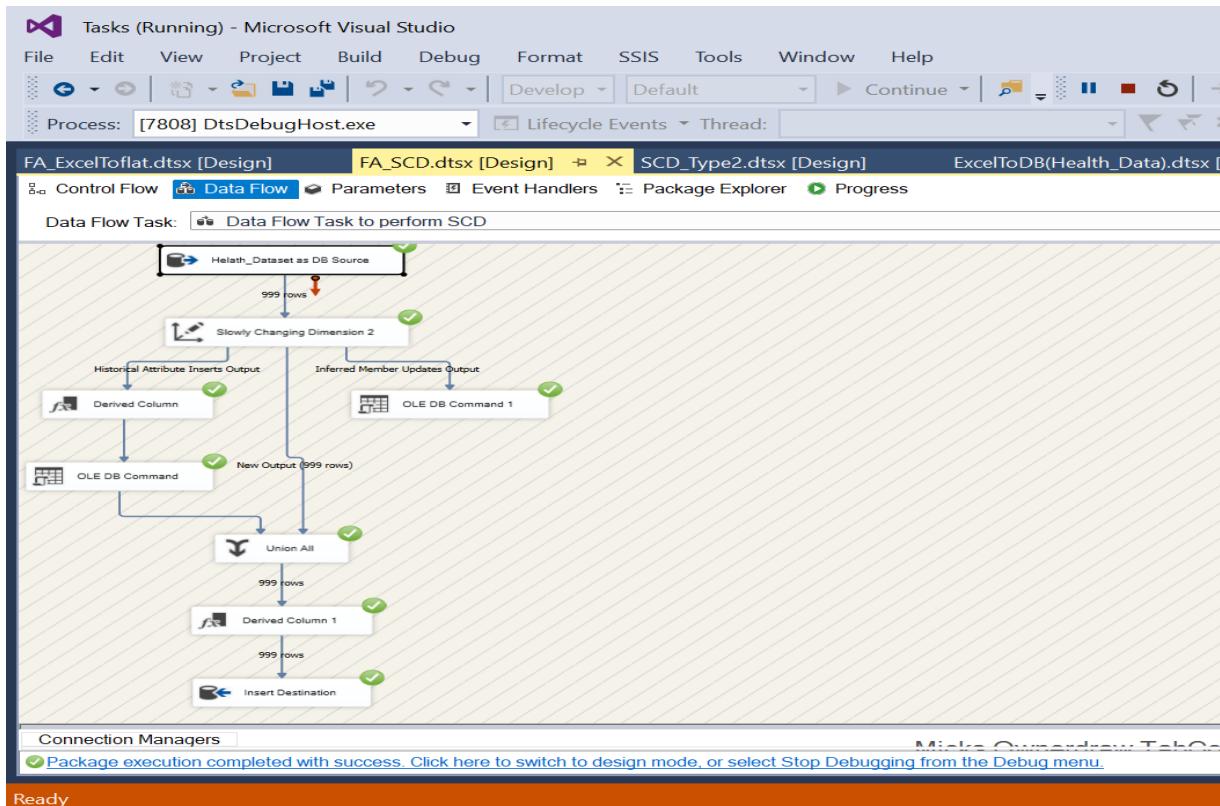

Save Cancel Script ⌘ F ⌘ R ⌘ L ⌘ K < > | ↴ ↵ ⌘ H ⌘ S 200 200+ Rows: 1 200 row(s) fetched - 329ms (34ms fetch), on 2022-10-05 IST en Writable Smart Insert 62 : 38 : 1632 Sel: 0 | 0 ...


```

h) Double click on SCD and select status as current and expired



I) Run the package



base Window Help

anusha > Auto > anusha > dbo@anusha > SQL_DDL_DML * <anusha> SCD * <anusha> SCD2 <anusha> SSIS_SCD

```
14: -----SET STATUS AS CURRENT OR EXPIRED-----
14: SELECT * FROM TE_FA_HEALTH_DATA_DEST;
```

Results 1 ×

	PID	AGE	GENDER	CASTE_NAME	CATEGORY_CODE	CATEGORY_NAME	STATUS	SURGERY_DATE
1	1	56	Female	OBC	M111	NEPHROLOGY	Current	2013-08-06 00:00:00.000
2	2	37	Male	Minorities	M111	NEPHROLOGY	Current	2013-08-08 00:00:00.000
3	3	50	Male	BC	M111	NEPHROLOGY	Current	2013-08-15 00:00:00.000
4	4	45	Male	BC	M111	NEPHROLOGY	Current	2013-08-24 00:00:00.000
5	5	54	Male	BC	M111	NEPHROLOGY	Current	2013-08-31 00:00:00.000
6	6	35	Male	OC	M111	NEPHROLOGY	Current	2013-08-31 00:00:00.000
7	7	52	Male	OC	M111	NEPHROLOGY	Current	2013-08-31 00:00:00.000
8	8	73	Male	BC	M111	NEPHROLOGY	Current	2014-05-05 00:00:00.000
9	9	56	Male	OC	S7	CARDIAC AND CARDIOTHORACIC SURGERY	Current	2014-06-14 00:00:00.000
10	10	49	Male	OC	S7	CARDIAC AND CARDIOTHORACIC SURGERY	Current	2014-06-17 00:00:00.000
11	11	52	Male	BC	M111	NEPHROLOGY	Current	2014-06-27 00:00:00.000
12	12	56	Male	SC	M5	CARDIOLOGY	Current	2014-07-04 00:00:00.000
13	13	65	Female	SC	M5	CARDIOLOGY	Current	2014-07-08 00:00:00.000
14	14	75	Male	OC	M5	CARDIOLOGY	Current	2014-07-10 00:00:00.000
15	15	52	Male	OC	M5	CARDIOLOGY	Current	2014-07-13 00:00:00.000
16	16	56	Male	Minorities	M5	CARDIOLOGY	Current	2014-07-15 00:00:00.000
17	17	1	Male(Child)	OC	S16	COCHLEAR IMPLANT SURGERY	Current	2017-08-16 00:00:00.000
18	18	54	Female	SC	S7	CARDIAC AND CARDIOTHORACIC SURGERY	Current	2014-07-29 00:00:00.000
19	19	48	Male	OC	S7	CARDIAC AND CARDIOTHORACIC SURGERY	Current	2014-07-28 00:00:00.000

k) Update the column in source table

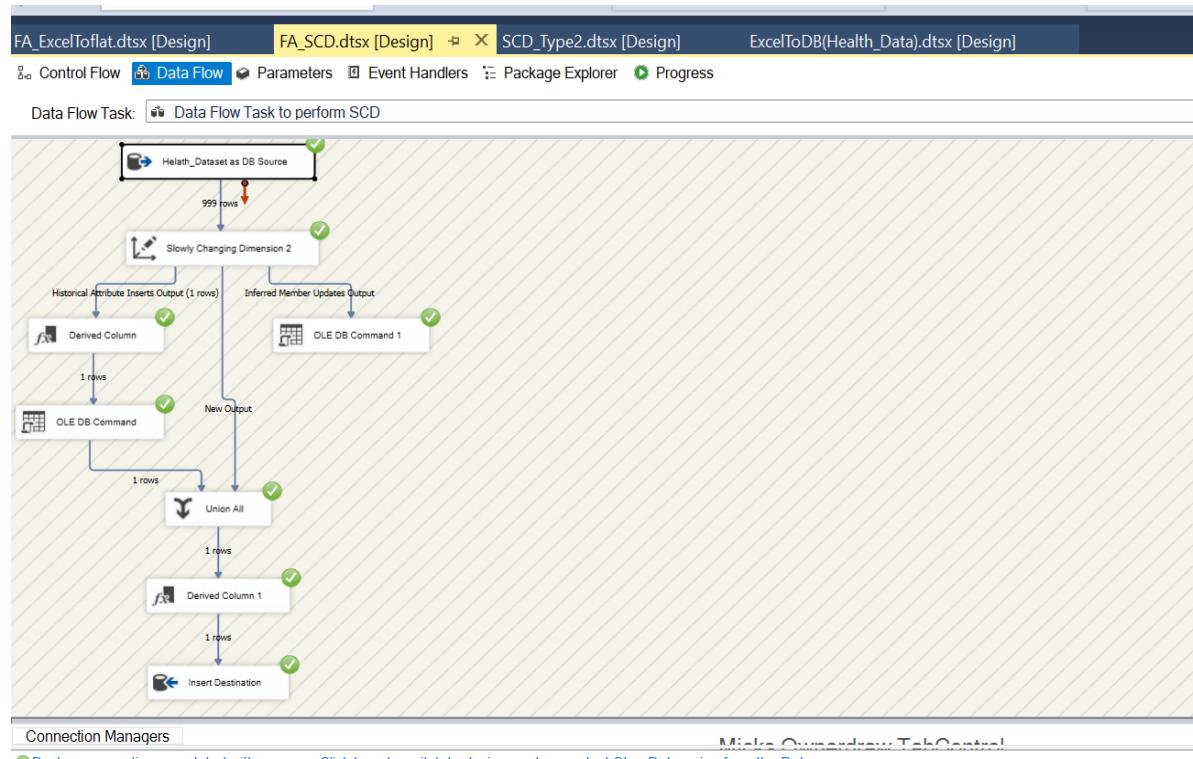
--PERFORM UPDATE AFTER INSERTION TO DESTINATION TABLE--

```
UPDATE TE_FA_HEALTH_DATASET
SET CASTE_NAME = 'BC'
WHERE PID=2;

SELECT * FROM TE_FA_HEALTH_DATASET;
```

	PID	AGE	GENDER	CASTE_NAME	CATEGORY_CODE	CATEGORY_NAME	SURGERY_DATE	DISCHARGE_DATE
1	1	56	Female	OBC	M111	NEPHROLOGY	2013-08-06 00:00:00.000	2013-09-07
2	2	37	Male	BC	M111	NEPHROLOGY	2013-08-08 00:00:00.000	2013-09-09
3	3	50	Male	BC	M111	NEPHROLOGY	2013-08-15 00:00:00.000	2013-10-18
4	4	45	Male	BC	M111	NEPHROLOGY	2013-08-24 00:00:00.000	2013-09-27
5	5	54	Male	BC	M111	NEPHROLOGY	2013-08-31 00:00:00.000	2013-10-02
6	6	35	Male	OC	M111	NEPHROLOGY	2013-08-31 00:00:00.000	2013-10-02
7	7	52	Male	OC	M111	NEPHROLOGY	2013-08-31 00:00:00.000	2013-10-02
8	8	73	Male	BC	M111	NEPHROLOGY	2014-05-05 00:00:00.000	
9	9	56	Male	OC	S7	CARDIAC AND CARDIOTHORACIC SURGERY	2014-06-14 00:00:00.000	2014-06-16
10	10	49	Male	OC	S7	CARDIAC AND CARDIOTHORACIC SURGERY	2014-06-17 00:00:00.000	2014-06-25
11	11	52	Male	BC	M111	NEPHROLOGY	2014-06-27 00:00:00.000	
12	12	56	Male	SC	M5	CARDIOLOGY	2014-07-04 00:00:00.000	2014-07-09
13	13	66	Female	SC	M5	CARDIOLOGY	2014-07-09 00:00:00.000	2014-07-16

k) Run package



I) Results in destination

The screenshot shows the SSMS interface with the following details:

- Top ribbon tabs: *<anusha> SQL_DDL_DML, *<anusha> SCD, <anusha> SCD2, <anusha> SSIS_SCD.
- Text pane: Contains the SQL command: `--RUN THE PACKAGE--
--RETRIEVE RESULT--
SELECT * FROM TE_FA_HEALTH_DATA_DEST;`
- Results pane: Titled "Results 1", displays the output of the query. The table has 19 rows and the following columns:

PID	AGE	GENDER	CASTE_NAME	STATUS	CATEGORY_CODE	CATEGORY_NAME	SURGERY_DATE	
1	56	Female	OBC	Current	M111	NEPHROLOGY	2013-08-06 00:00:00.000	
2	37	Male	Minorities	Expired	M111	NEPHROLOGY	2013-08-08 00:00:00.000	
3	37	Male	BC	Current	M111	NEPHROLOGY	2013-08-15 00:00:00.000	
4	50	Male	BC	Current	M111	NEPHROLOGY	2013-08-24 00:00:00.000	
5	45	Male	BC	Current	M111	NEPHROLOGY	2013-08-31 00:00:00.000	
6	54	Male	BC	Current	M111	NEPHROLOGY	2013-08-31 00:00:00.000	
7	35	Male	OC	Current	M111	NEPHROLOGY	2013-08-31 00:00:00.000	
8	52	Male	OC	Current	M111	NEPHROLOGY	2013-08-31 00:00:00.000	
9	73	Male	BC	Current	M111	NEPHROLOGY	2014-05-05 00:00:00.000	
10	9	56	Male	OC	S7	CARDIAC AND CARDIOTHORACIC SURGERY	2014-06-14 00:00:00.000	
11	10	49	Male	OC	S7	CARDIAC AND CARDIOTHORACIC SURGERY	2014-06-17 00:00:00.000	
12	11	52	Male	BC	Current	M111	NEPHROLOGY	2014-06-27 00:00:00.000
13	12	56	Male	SC	Current	M5	CARDIOLOGY	2014-07-04 00:00:00.000
14	13	65	Female	SC	Current	M5	CARDIOLOGY	2014-07-08 00:00:00.000
15	14	75	Male	OC	Current	M5	CARDIOLOGY	2014-07-10 00:00:00.000
16	15	52	Male	OC	Current	M5	CARDIOLOGY	2014-07-13 00:00:00.000
17	16	56	Male	Minorities	Current	M5	CARDIOLOGY	2014-07-15 00:00:00.000
18	17	1	Male(Child)	OC	S16	COCHLEAR IMPLANT SURGERY	2017-08-16 00:00:00.000	
19	18	54	Female	SC	Current	S7	CARDIAC AND CARDIOTHORACIC SURGERY	2014-07-29 00:00:00.000
- Bottom status bar: Shows "200+ Rows: 1 200 row(s) fetched - 236ms, on 2022-10-06 at 12:14".

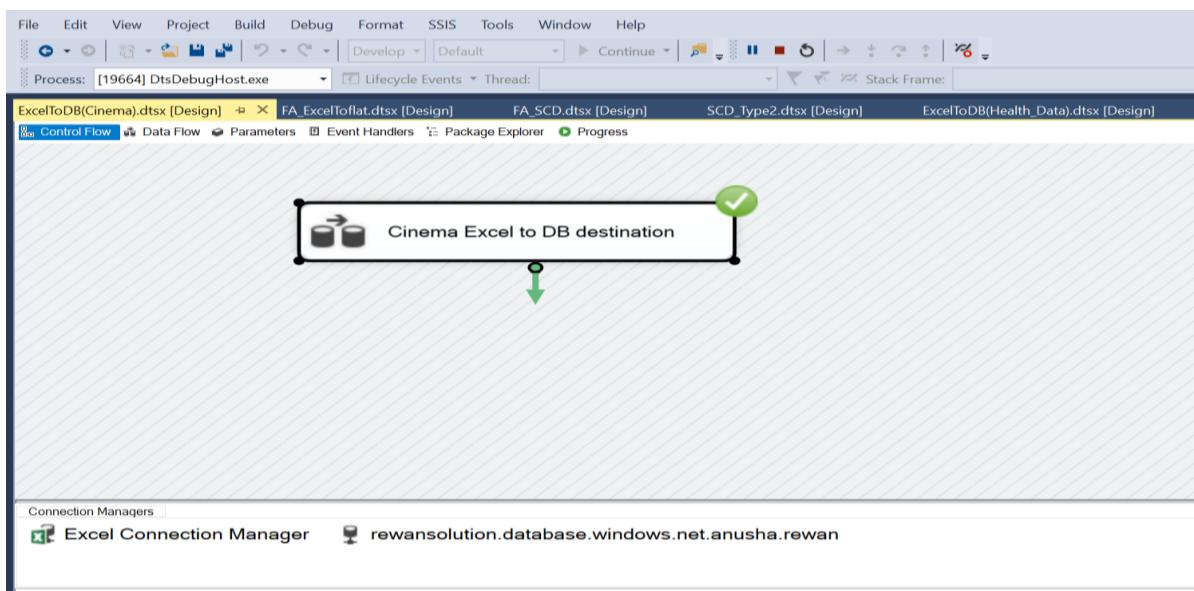
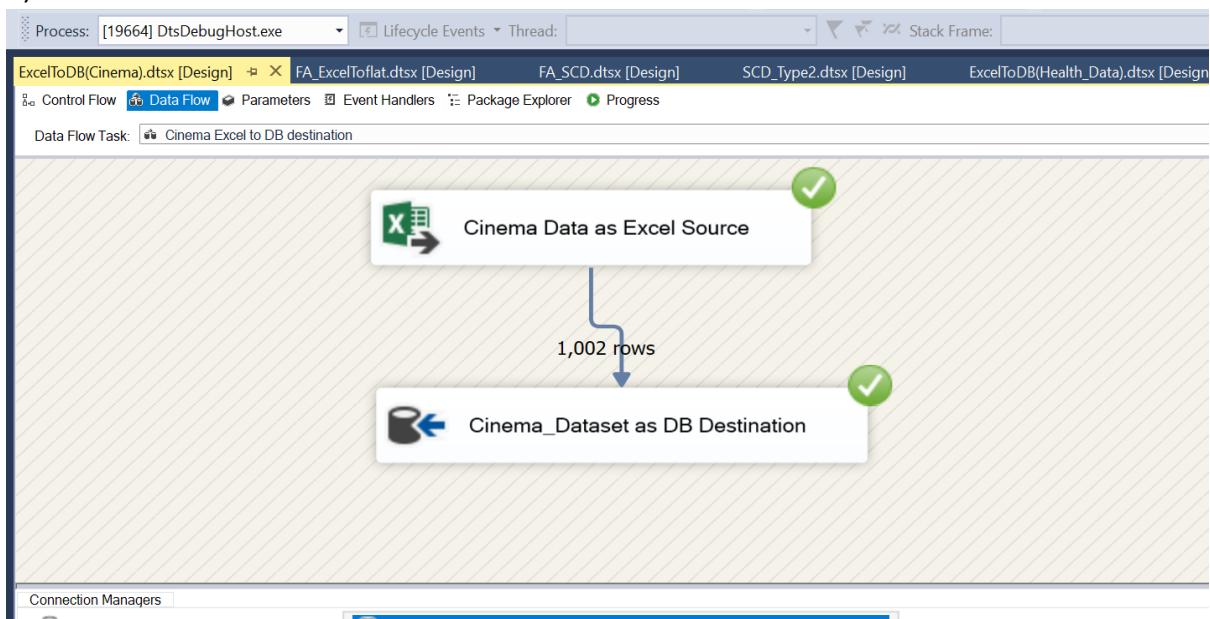
3) Aggregate transformation in SSIS

a) Create source table

-----EXTRACTING DATA FROM CINEMA DATASET-----

```
CREATE TABLE TE_FA_CINEMA_DATASET (
    [Film_Type] nvarchar(255),
    [Film_code] float,
    [Cinema_code] float,
    [Total_sales] float,
    [Tickets_sold] float,
    [Tickets_out] float,
    [Show_time] float,
    [Occu_perc] float,
    [Ticket_price] float,
    [Ticket_use] float,
    [Capacity] float,
    [Date] datetime,
    [Month] float,
    [Quarter] float,
    [Day] float
)
```

b) Load cinema dataset from excel to destination table

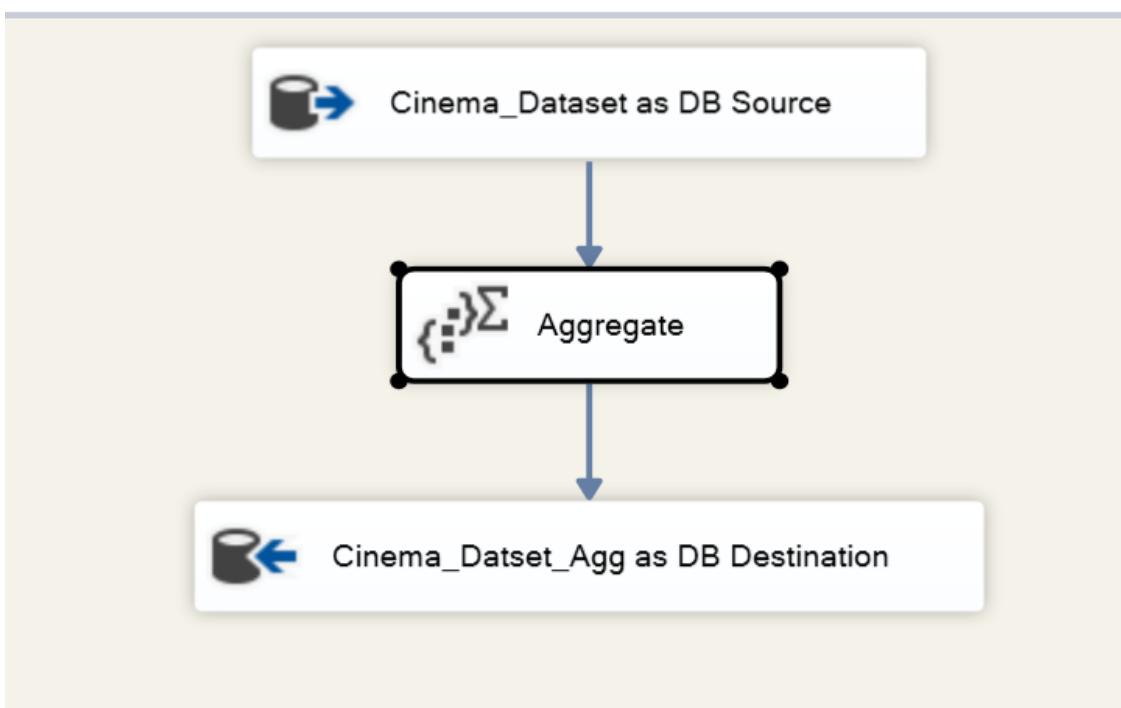


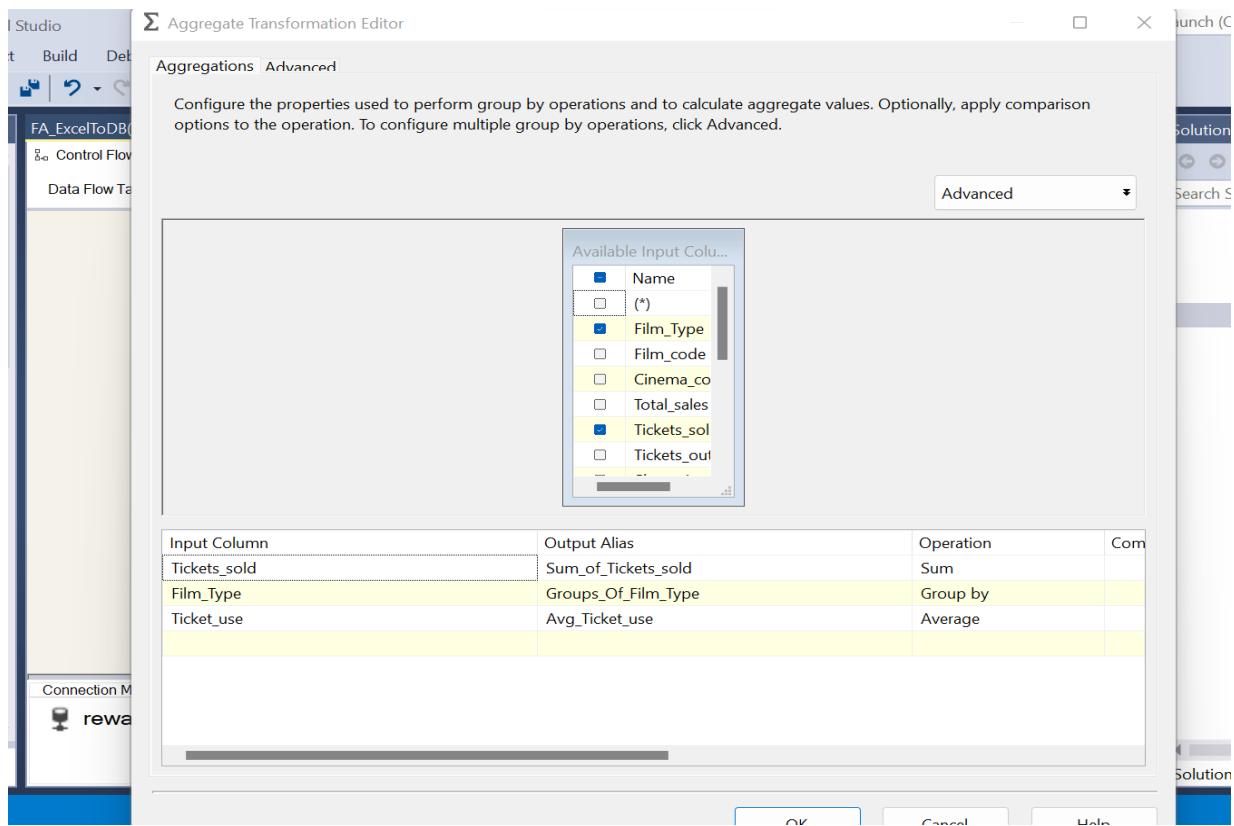
c) Resultant destination table

SELECT * FROM TE_FA_CINEMA_DATASET;

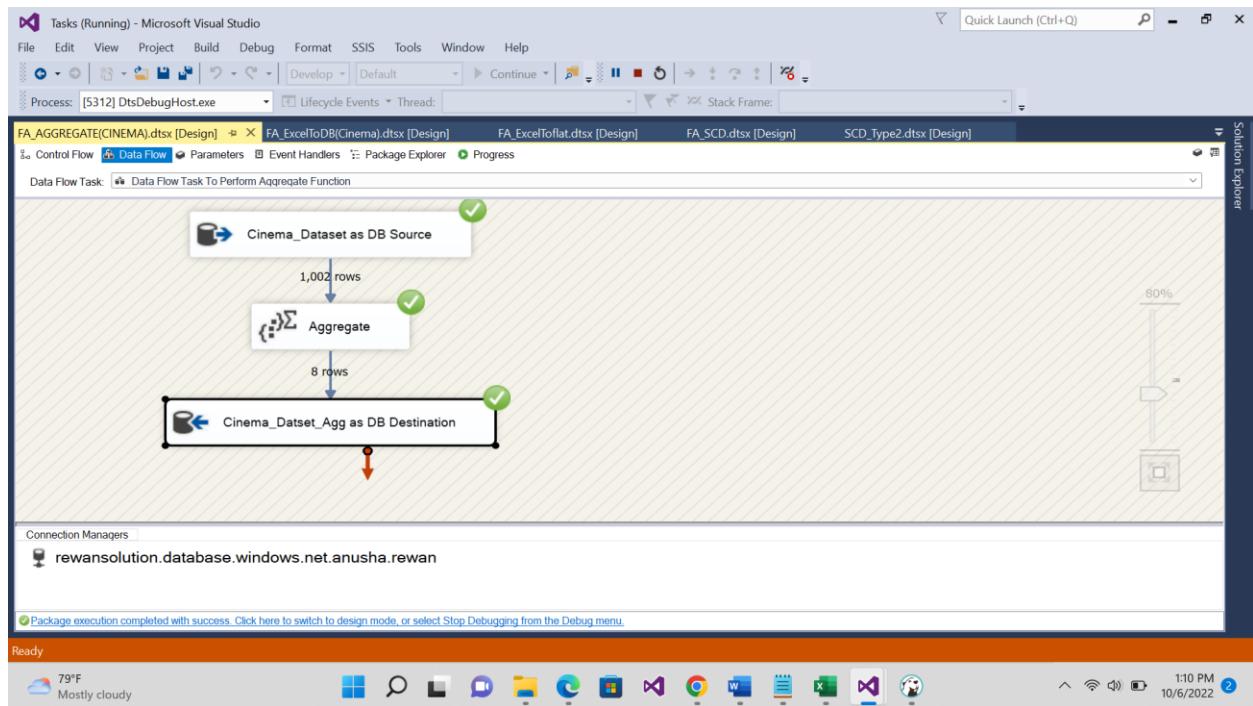
rec	Film_Type	Film_code	Cinema_code	Total_sales	Tickets_sold	Tickets_out	Show_time	Occu_perc	Ticket_price	Ti
1	Romance	1,492	304	3,900,000	26	0	4	4.26	150,000	
2	Romance	1,492	352	3,360,000	42	0	5	8.08	80,000	
3	Romance	1,492	489	2,560,000	32	0	4	20	80,000	
4	Romance	1,492	429	1,200,000	12	0	1	11.01	100,000	
5	Romance	1,492	524	1,200,000	15	0	3	16.67	80,000	
6	Romance	1,492	71	1,050,000	7	0	3	0.98	150,000	
7	Romance	1,492	163	1,020,000	10	0	3	7.69	102,000	
8	Romance	1,492	450	750,000	5	0	3	1.57	150,000	
9	Romance	1,492	51	750,000	11	0	2	0.95	68,181,81818	
10	Romance	1,492	522	600,000	4	0	3	1.55	150,000	
11	Romance	1,492	43	480,000	6	0	3	0.44	80,000	
12	Romance	1,492	529	480,000	4	0	3	2.96	120,000	
13	Romance	1,492	82	400,000	5	0	6	0.53	80,000	
14	Romance	1,492	344	300,000	2	0	3	0.25	150,000	
15	Romance	1,492	73	240,000	2	0	1	2.04	120,000	
16	Romance	1,492	304	16,500,000	112	0	4	18.33	147,321,4286	
17	Romance	1,492	352	13,950,000	93	0	5	10.57	150,000	
18	Romance	1,492	344	10,200,000	68	0	3	8.54	150,000	
19	Romance	1,492	71	6,600,000	44	0	3	6.14	150,000	
20	Romance	1,492	163	3,360,000	31	0	3	24.8	108,387,0968	

- d) Create new package and select db as source and db destination
 - e) Select aggregate transformation and set the aggregate values





f) save and run package



g) Aggregate function results in sql and SSIS

```
--AGGREGATE IN SQL--  
SELECT sum(Tickets_sold) AS SUM, AVG(Ticket_use) AS AVG ,film_type from TE_FA_CINEMA_DATASET  
group by Film_Type
```

Results 1 Results 2 Results 4

SELECT sum(Tickets_sold) AS SUM, AVG(Ticket_use) AS AVG ,film_type Enter a SQL expression to filter results (use Ctrl+Space)

	SUM	Avg	film_type
1	16,239	143.6017699115	Family
2	25,541	311.1097560976	Science
3	3,277	32.0392156863	Comedy
4	3,413	30.4375	Drama
5	30,117	281.0186915888	Horror
6	9,924	65.6092715232	Thriller
7	2,484	15.5974842767	Romance
8	84,022	476.1022727273	Action

Save Cancel Script IST en Writable Smart Insert Rows: 1 8 row(s) fetched - 251ms, on 2022-10-06 at 13:09:1C

```
--AGGREGATE IN SSIS--  
SELECT * FROM TE_FA_CINEMA_DATASET_AGG
```

Results 1 Results 2 Results 4

SELECT * FROM TE_FA_CINEMA_DATASET Enter a SQL expression to filter results (use Ctrl+Space)

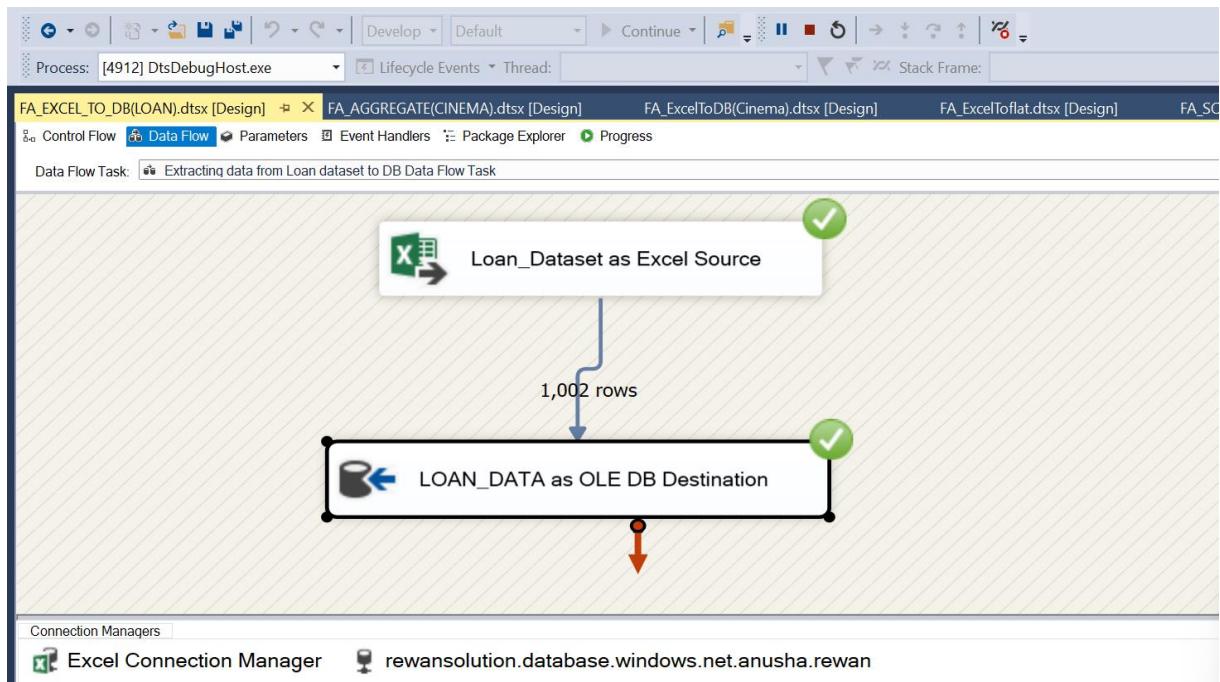
	Sum_of_Tickets_sold	Groups_of_Film_Type	Avg_Ticket_use
1	84,022	Action	476.1022727273
2	3,413	Drama	30.4375
3	2,484	Romance	15.5974842767
4	3,277	Comedy	32.0392156863
5	30,117	Horror	281.0186915888
6	25,541	Science	311.1097560976
7	16,239	Family	143.6017699115
8	9,924	Thriller	65.6092715232

Save Cancel Script IST en Writable Smart Insert Rows: 1 8 row(s) fetched - 532ms, on 2022-10-06 at 13:08:2C

1:10 PM 10/6/2022

4) Extracting Loan data from source to destination table

a) data flow task



b) Run the task and resultant destination table

The screenshot shows the SSMS Results pane displaying the output of a SELECT query. The query is:

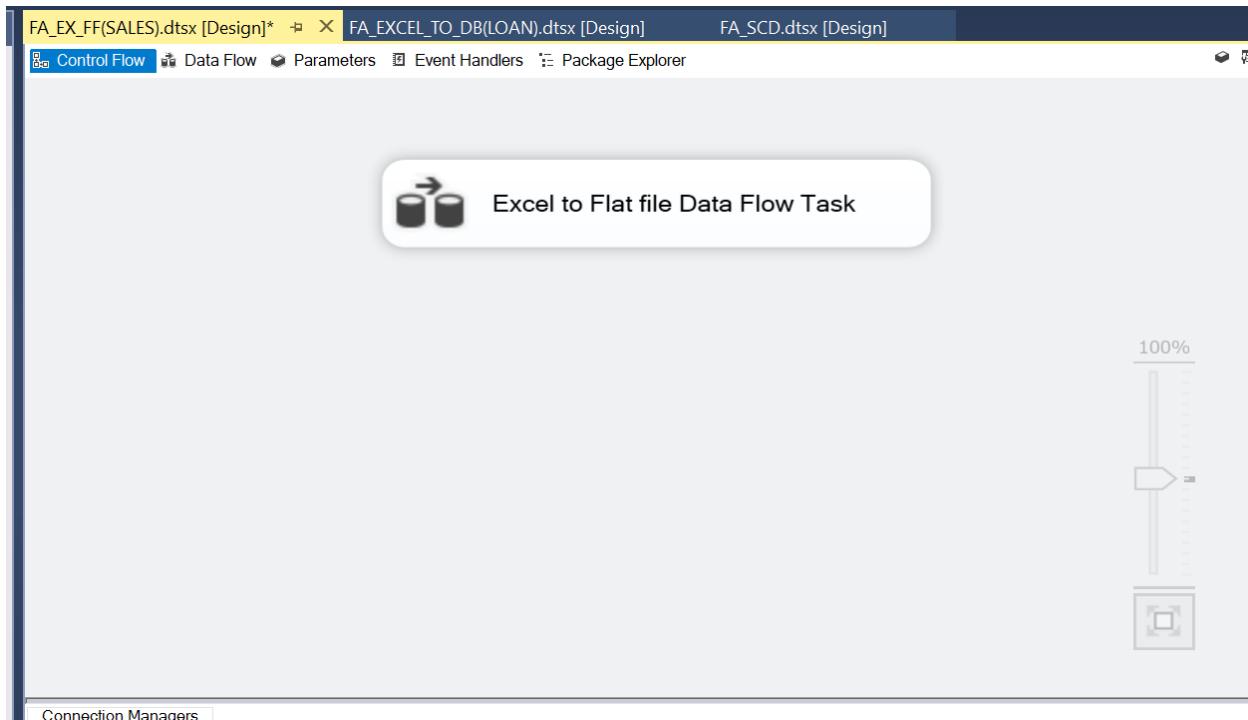
```
SELECT * FROM TE_FA_LOAN_DATASET
```

The results show 20 rows of data from the TE_FA_LOAN_DATASET table. The columns are:

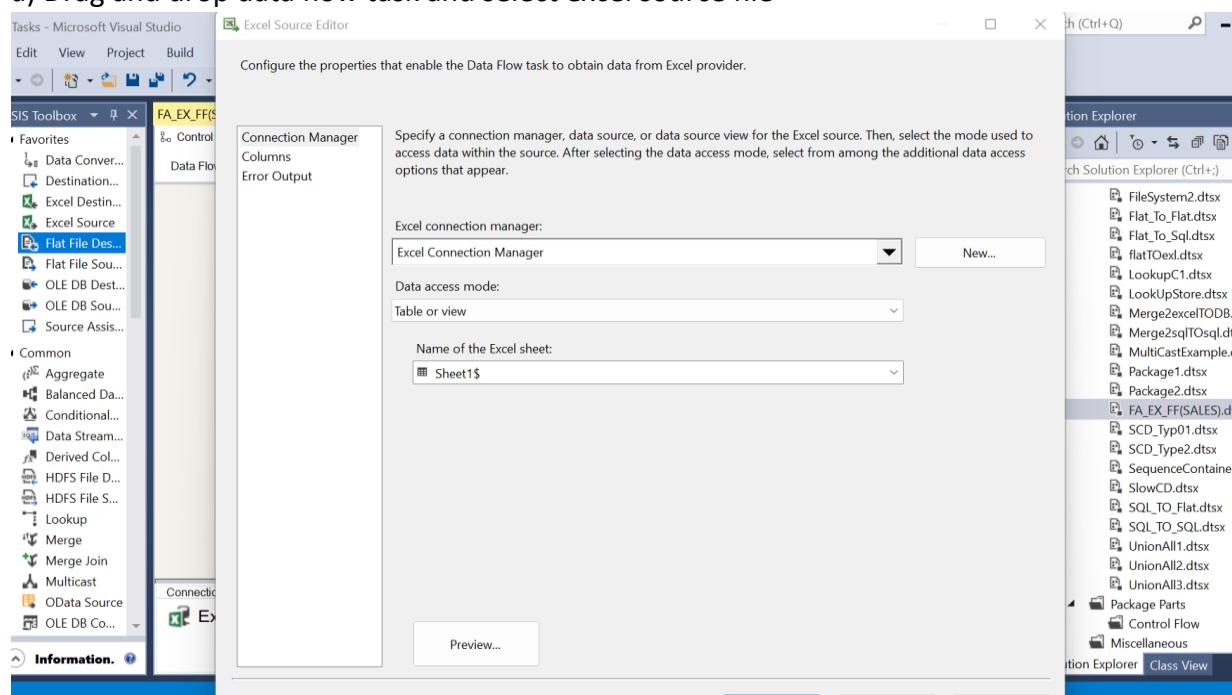
	LoanNr_ChkDgt	Name	City	State	Zip	Bank	BankState	NAICS
1	1,000,014,003	ABC HOBBYCRAFT	EVANSVILLE	IN	47,711	FIFTH THIRD BANK	OH	451,120
2	1,000,024,006	LANDMARK BAR & GRILLE (THE)	NEW PARIS	IN	46,526	1ST SOURCE BANK	IN	722,410
3	1,000,034,009	WHITLOCK DDS, TODD M.	BLOOMINGTON	IN	47,401	GRANT COUNTY STATE BANK	IN	621,210
4	1,000,044,001	BIG BUCKS PAWN & JEWELRY, LLC	BROKEN ARROW	OK	74,012	1ST NATL BK & TR CO OF BROKEN	OK	0
5	1,000,054,004	ANASTASIA CONFECTIONS, INC.	ORLANDO	FL	32,801	FLORIDA BUS. DEVEL CORP	FL	0
6	1,000,084,002	B&T SCREW MACHINE COMPANY, PLAINVILLE	CT		6,062	TD BANK, NATIONAL ASSOCIATION	DE	332,721
7	1,000,093,009	MIDDLE ATLANTIC SPORTS CO INK UNION	NJ		7,083	WELLS FARGO BANK NATL ASSOC	SD	0
8	1,000,094,005	WEAVER PRODUCTS	SUMMERFIELD	FL	34,491	REGIONS BANK	AL	811,118
9	1,000,104,006	TURTLE BEACH INN	PORT SAINT JOE	FL	32,456	CENTENNIAL BANK	FL	721,310
10	1,000,124,001	INTEXT BUILDING SYS LLC	GLASTONBURY	CT	6,073	WEBSTER BANK NATL ASSOC	CT	0
11	1,000,134,004	COMMERCIAL TRUCKING MAINTENANCE CHARLOTTE	NC		28,256	SUNTRUST BANK	GA	811,111
12	1,000,144,007	PROFESSIONAL ELEVATOR SFRVIC CHICAGO	IL		60,605	BANK OF AMERICA NATL ASSOC	OR	235,950
13	1,000,146,010	CARVEL	COMMERCIAL TRUCKING MAINTENANCE		27,502	STEARNS BK NATL ASSOC	MN	445,299
14	1,000,154,010	ORCHARD CAFE & BAKERY, INC.	SLATERSVILLE	RI	2,876	CITIZENS BANK NATL ASSOC	RI	0
15	1,000,214,004	EBC INVESTMENTS LLC	WINSTON-SALEM	NC	27,106	NORTHWEST PIEDMONT DEVEL CC	NC	0
16	1,000,244,002	ENVIRONMENTAL ROOFING SYSTEM	OKLAHOMA CITY	OK	73,112	BANK OF AMERICA NATL ASSOC	NC	421,330
17	1,000,254,005	ARK MANAGEMENT ENTERPRISES	MIDLAND	TX	79,701	WELLS FARGO BANK NATL ASSOC	TX	0
18	1,000,284,003	FANTASTIC SAMS	PLANO	TX	75,093	NEWTEK SMALL BUS. FINANCE INC	NY	0
19	1,000,294,006	SIR GOONY'S GOLF	KNOXVILLE	TN	37,922	CITIZENS NATIONAL BANK	TN	0
20	1,000,324,002	ECONOLODGE OF DUMAS	DUMAS	TX	79,029	BUSINESS LOAN CENTER, LLC	SC	0

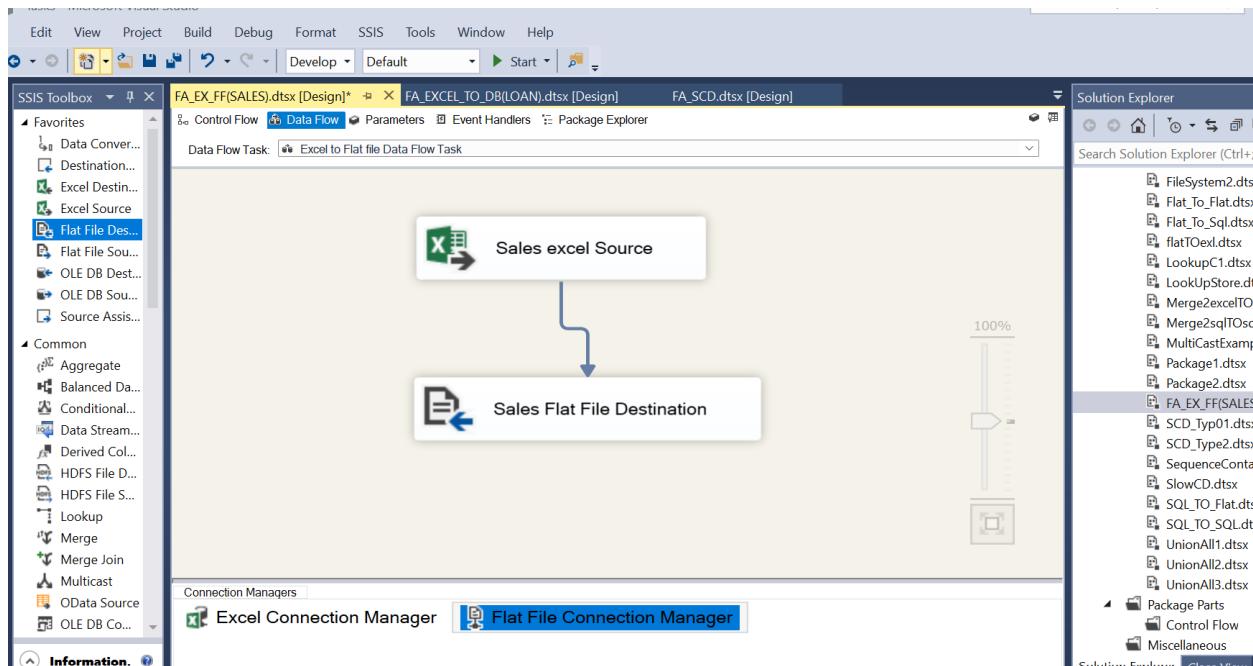
At the bottom of the results pane, it says "200+ Rows: 1 200 row(s) fetched - 376ms (127ms fetch), on 2022-03-16 10:46:00".

5) Extracting data from Excel to flat file

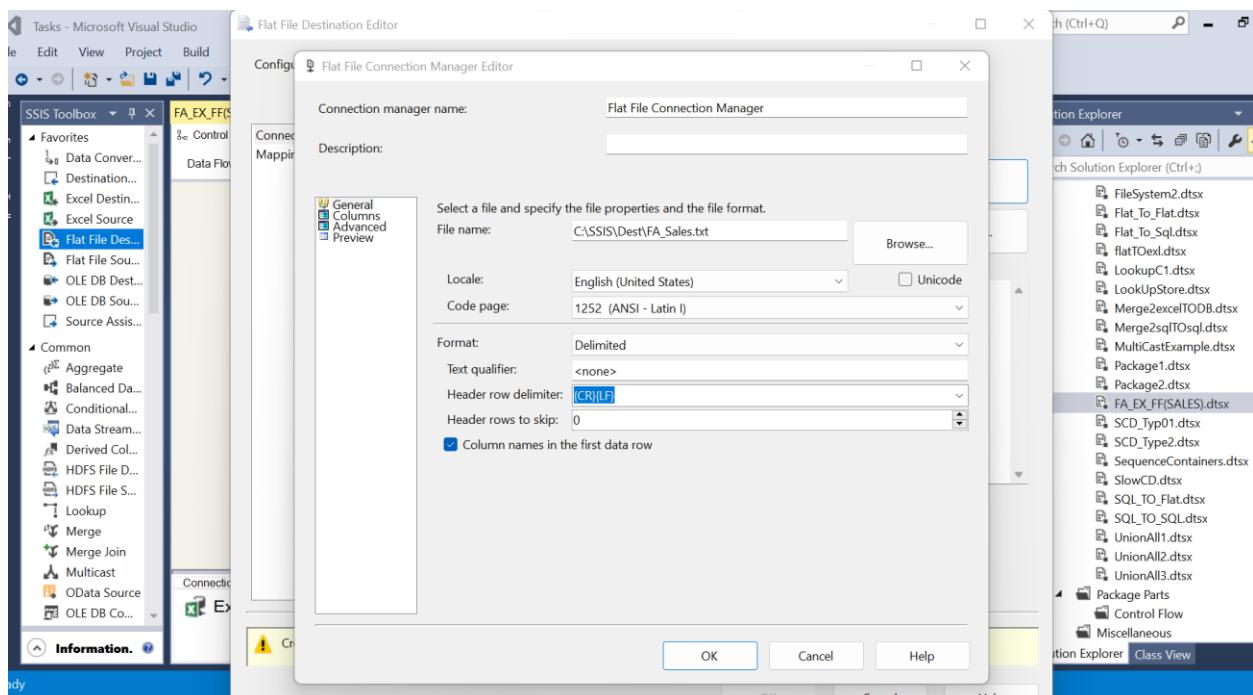


a) Drag and drop data flow task and select excel source file

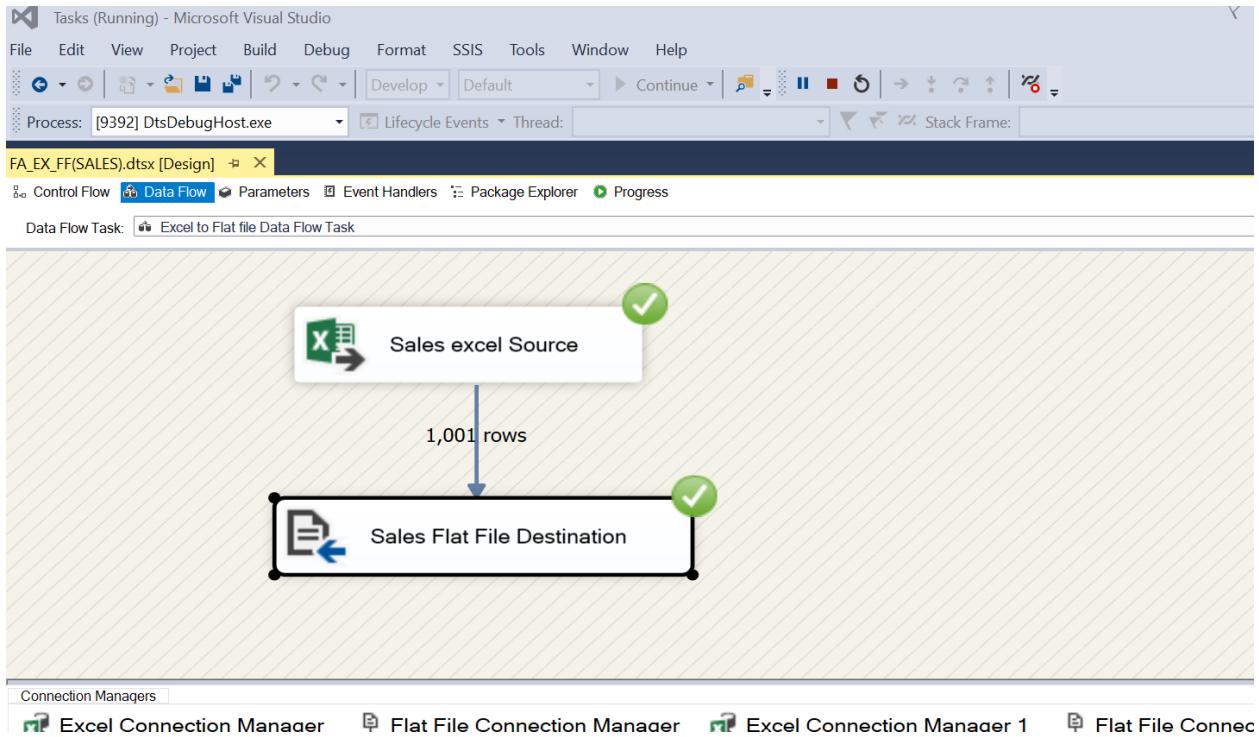




b) Select destination flat file



c) Run task

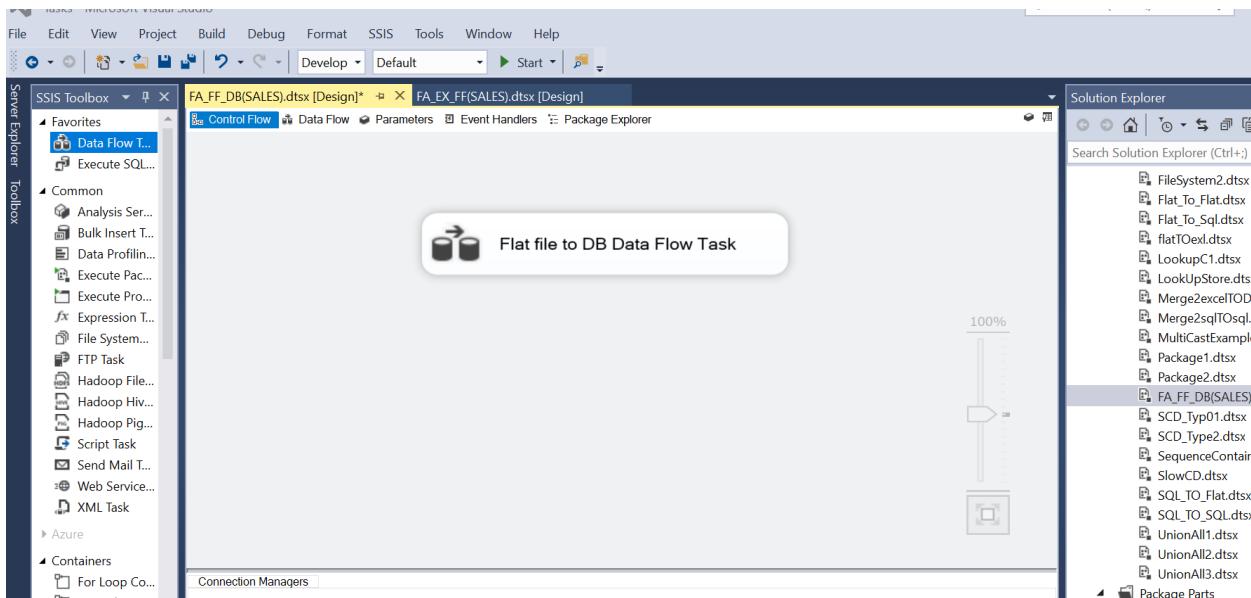


d) Destination flat file

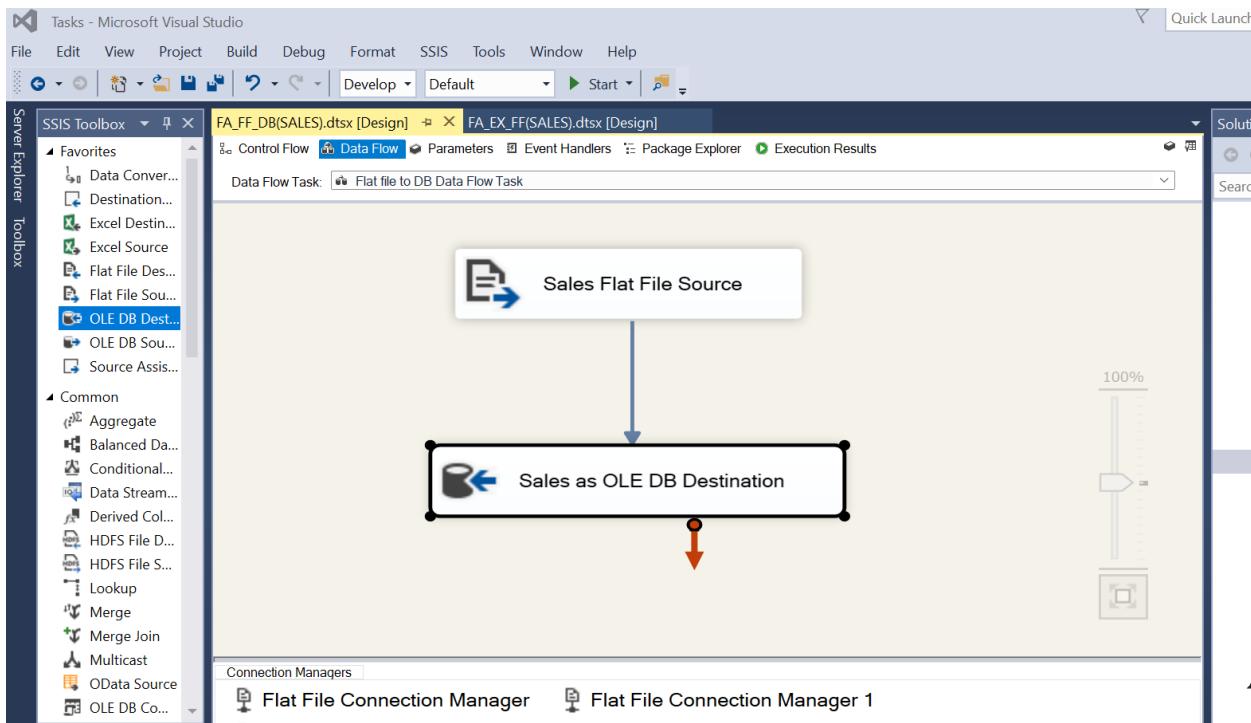
```
FA_SALES_DATA - Notepad
File Edit View
Type,Days for shipping (real),Days for shipment (scheduled),Benefit per order,Sales per customer,Delivery Status,Late_delivery_risk,Category Id,Category Name
DEBIT,3,4,91,25,314.6400145999997,Advance shipping,0,73,Sporting Goods,Caguas,Puerto Rico,Cally,20755,Holloway,Consumer,PR,5365 Noble Nectar Island,725,2,F
TRANSFER,5,4,-249.0899963,311.3599854000003,Late delivery,1,73,Sporting Goods,Caguas,Puerto Rico,Irene,19492,Luna,Consumer,PR,2679 Rustic Loop,725,2,F
CASH,4,4,-247.779987999999,309.7200012000001,Shipping on time,0,73,Sporting Goods,San Jose,EE.UU.,Gillian,19491,Maldonado,Consumer,CA,8510 Round Bear Ga
DEBIT,3,4,22.86000061,304.8099975999997,Advance shipping,0,73,Sporting Goods,Los Angeles,EE.UU.,Tana,19490,Tate,Home Office,CA,3200 Amber Bend,98027,2,F
PAYMENT,2,4,134.21000670000001,298.25,Advance shipping,0,73,Sporting Goods,Caguas,Puerto Rico,Ori,19489,Hendricks,Corporate,PR,8671 Iron Anchor Corners,725
TRANSFER,6,4,18.57999991999999,294.9800109999999,Shipping canceled,0,73,Sporting Goods,Tonawanda,EE.UU.,Kimberly,19488,Flowers,Consumer,NY,2122 Hazy Corn
DEBIT,2,1,95.180000309999997,288.4200134000002,Late delivery,1,73,Sporting Goods,Caguas,Puerto Rico,Constance,19487,Terrell,Home Office,PR,1879 Green Pine |
TRANSFER,2,1,61.430000309999997,285.1400145999997,Late delivery,1,73,Sporting Goods,Miami,EE.UU.,Erica,19486,Stevens,Corporate,FL,7595 Cotton Log Row,3316
CASH,3,2,133.7200012000001,278.5899963,Late delivery,1,73,Sporting Goods,Caguas,Puerto Rico,Nichole,19485,Olsen,Corporate,PR,2051 Dusty Route,725,2,Fitness
CASH,2,1,132.1499939,275.3099975999997,Late delivery,1,73,Sporting Goods,San Ramon,EE.UU.,Oprah,19484,Delacruz,Corporate,CA,9139 Blue Blossom Court,94583,
TRANSFER,6,2,138.5800017999999,272.0299987999999,Shipping canceled,0,73,Sporting Goods,Caguas,Puerto Rico,Germane,19483,Short,Corporate,PR,4058 Quiet Heig
TRANSFER,5,2,45.68999862999998,268.7600097999998,Late delivery,1,73,Sporting Goods,Freeport,EE.UU.,Freya,19478,Wheeler,Consumer,NY,3243 Shady Corner,1152
TRANSFER,4,2,21.76000022999999,262.2000122,Late delivery,1,73,Sporting Goods,Salinas,EE.UU.,Cassandra,19481,Jensen,Corporate,CA,131 Sunny Treasure Green,9
DEBIT,2,1,24.57999991999999,245.8099976,Late delivery,1,73,Sporting Goods,Caguas,Puerto Rico,Natalie,19488,McFadden,Corporate,PR,2531 Wishing Square,725,2,
TRANSFER,2,1,16.38999939,327.75,Late delivery,1,73,Sporting Goods,Peabody,EE.UU.,Kimberley,19479,Sharpe,Corporate,MA,6417 Silver Towers,1960,2,Fitness,42.5
DEBIT,2,1,-259.5799865999998,324.4700012000001,Late delivery,1,73,Sporting Goods,Caguas,Puerto Rico,Sade,19478,Lancaster,Corporate,PR,257 Harvest Close,72
PAYMENT,5,2,-246.3600006000001,321.2000122,Late delivery,1,73,Sporting Goods,Canovanas,Puerto Rico,Brynn,19477,Giles,Corporate,PR,7342 Hazy Beacon Park,72
CASH,2,1,23.84000015000002,317.9200134000002,Late delivery,1,73,Sporting Goods,Paramount,EE.UU.,Ciera,19476,Bird,Corporate,CA,7787 Lazy Corners,90723,2,F
DEBIT,2,1,102.2600020999999,314.6400145999997,Late delivery,1,73,Sporting Goods,Caguas,Puerto Rico,Bo,19475,Griffin,Consumer,PR,5136 Rustic Pioneer Estate
PAYMENT,0,0,87.18000030999997,311.3599854000003,Shipping on time,0,73,Sporting Goods,Mount Prospect,EE.UU.,Kim,19474,Simon,Consumer,IL,1723 Tawny Via,600
TRANSFER,0,0,154.8600006000001,309.7200012000001,Shipping on time,0,73,Sporting Goods,Long Beach,EE.UU.,Kellie,19473,Farmer,Corporate,CA,7111 Silent Fox |
TRANSFER,5,4,82.308000305000001,304.8099975999997,Late delivery,1,73,Sporting Goods,Caguas,Puerto Rico,Alma,19472,Conley,Corporate,PR,3732 Old Mountain Ban
TRANSFER,4,2,22.37000083999999,298.25,Late delivery,1,73,Sporting Goods,Rancho Cordova,EE.UU.,Yeo,19471,Bird,Corporate,CA,6217 Rustic Lake Forest,95670,2,
TRANSFER,3,2,17.70000076000002,294.980010999999,Shipping canceled,0,73,Sporting Goods,Caguas,Puerto Rico,Lucy,19470,Mcknight,Corporate,PR,1082 Quiet Tre
TRANSFER,2,2,90.27999878,288.4200134000002,Shipping canceled,0,73,Sporting Goods,Billings,EE.UU.,Simone,19469,Vance,Corporate,MT,3176 Round Gate,59102,2,F
DEBIT,6,2,131.1699982000001,285.1400145999997,Late delivery,1,73,Sporting Goods,Caguas,Puerto Rico,Roary,19468,Wheeler,Corporate,PR,1426 Fallen Line,725,2
TRANSFER,5,2,95.5400001999999,278.5899963,Late delivery,1,73,Sporting Goods,Wilkes Barre,EE.UU.,Quail,19467,Ashley,Consumer,PA,9814 Emerald Prairie Limit
PAYMENT,4,4,82.58999633999999,275.3099975999997,Shipping on time,0,73,Sporting Goods,Caguas,Puerto Rico,Hannah,19466,Velez,Corporate,PR,8271 Tawny Elk Abb
DEBIT,3,4,-17.13999939,272.0299987999999,Advance shipping,0,73,Sporting Goods,Roseville,EE.UU.,Evelyn,19465,Kelly,Corporate,MI,3931 Gentle Ramp,48066,2,F
TRANSFER,2,4,23.6499961999999,268.7600097999998,Advance shipping,0,73,Sporting Goods,Bellflower,EE.UU.,Jael,19464,Mcfarland,Consumer,CA,9699 Honey Rise,|
DEBIT,6,4,73.41999817,262.2000122,Late delivery,1,73,Sporting Goods,Caguas,Puerto Rico,Teagan,19463,Romero,Consumer,PR,1564 Rocky Terrace,725,2,Fitness,18.2
```

6) Extracting data from flat to database destination

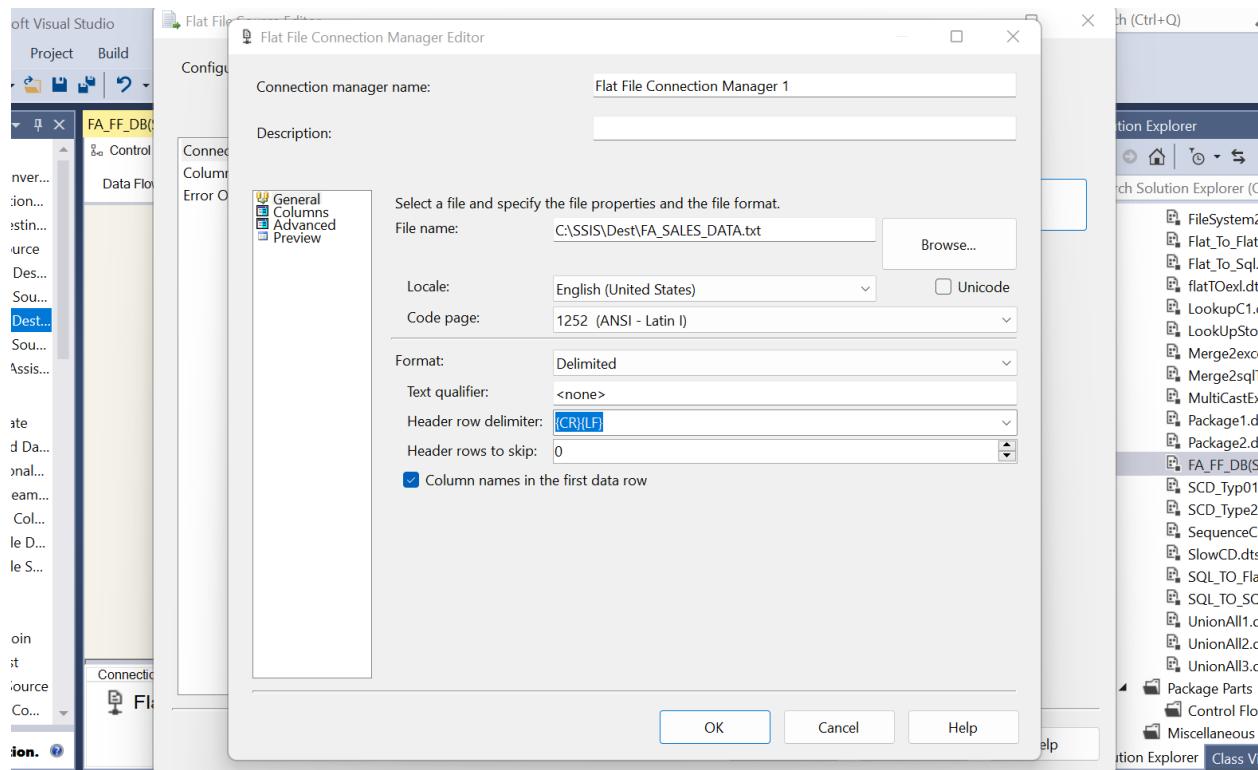
a) Select data flow task



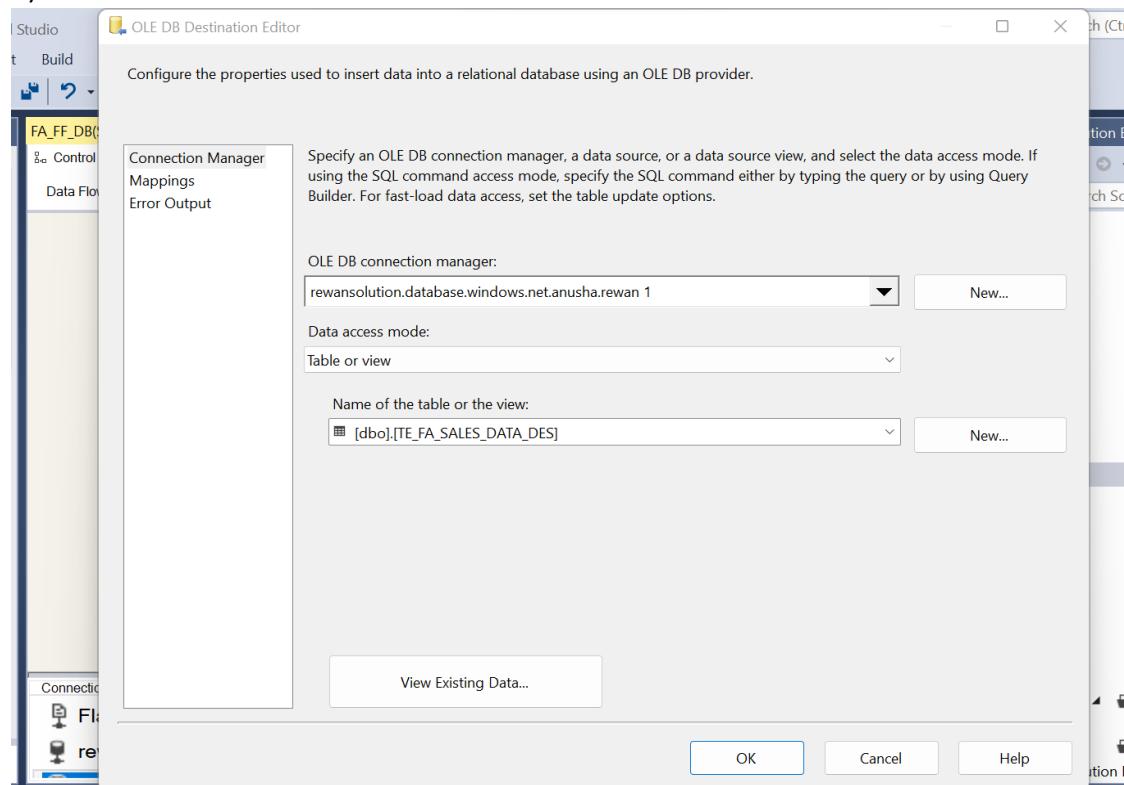
b) Select flat file as source



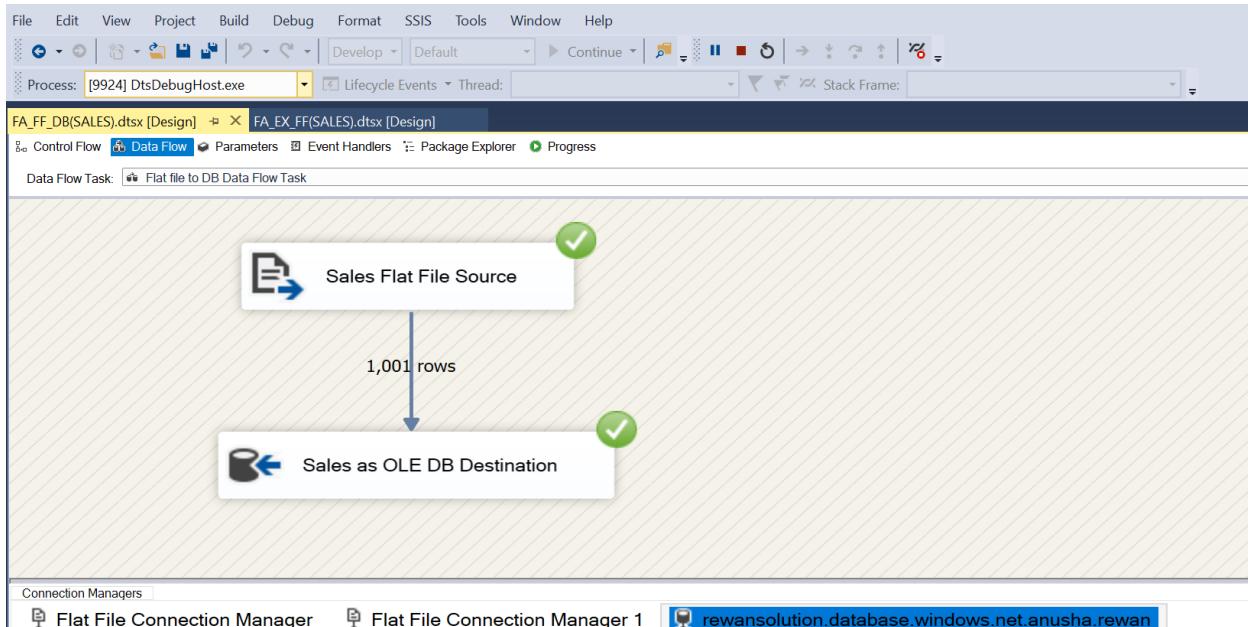
c) Source connection manager



d) Destination table



e) Run task



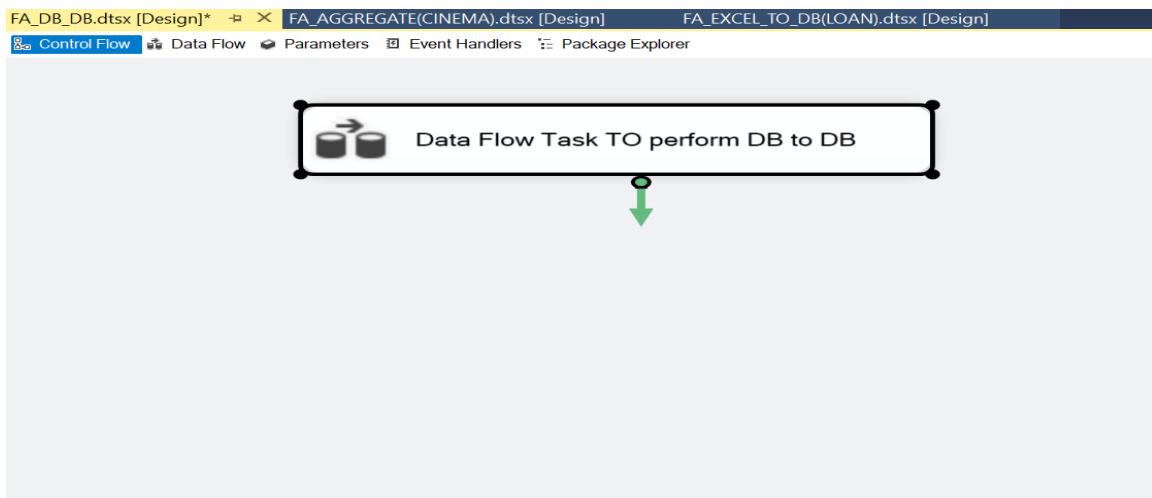
f) Destination table

The screenshot shows the SQL Server Management Studio (SSMS) interface. The Object Explorer on the left shows a tree structure of database objects, including tables like Employee_Expression, JOB_ID, and TE_FA_SALES_DATA_DEST. The Results pane on the right displays the data from the TE_FA_SALES_DATA_DEST table. The results grid shows 1,001 rows of transaction details, with columns including Type, Days_for_shipping, Days_for_shipment, Benefit_per_order, Sales_per_customer, Delivery_Status, Late_delivery_risk, and Category_ID. The data includes various transaction types like DEBIT, TRANSFER, and CASH, along with their corresponding values for days, benefit, sales, delivery status, risk, and category ID.

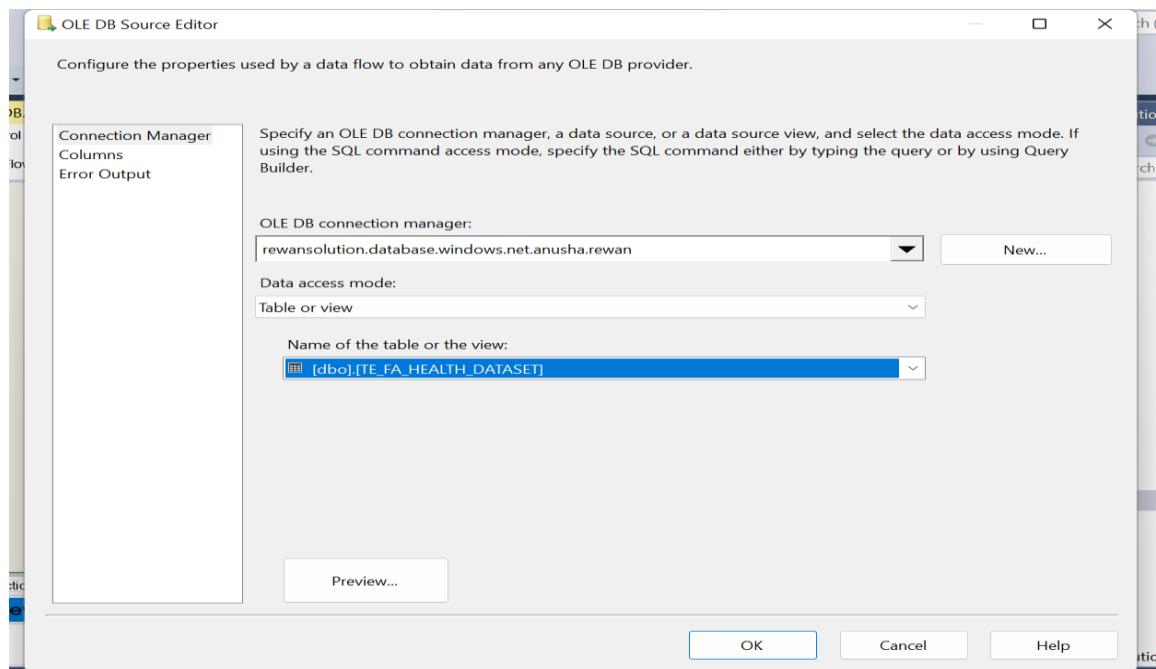
Type	Days_for_shipping	Days_for_shipment	Benefit_per_order	Sales_per_customer	Delivery_Status	Late_delivery_risk	Category_ID
DEBIT	3	4	91.25	314.6400145999997	Advance shipping	0	73
TRANSFER	5	4	-249.0899963	311.35998540000003	Late delivery	1	73
CASH	4	4	-247.7799987999999	309.72000120000001	Shipping on time	0	73
DEBIT	3	4	22.86000061	304.8099759999997	Advance shipping	0	73
PAYOUTMENT	2	4	134.21000670000001	298.25	Advance shipping	0	73
TRANSFER	6	4	18.57999991999999	294.9800109999999	Shipping canceled	0	73
DEBIT	2	1	95.180000309999997	288.42001340000002	Late delivery	1	73
TRANSFER	2	1	68.430000309999997	285.14001459999997	Late delivery	1	73
CASH	3	2	133.72000120000001	278.5899963	Late delivery	1	73
CASH	2	1	132.1499939	275.3099759999997	Late delivery	1	73
TRANSFER	6	2	130.5800017999999	272.0299987999999	Shipping canceled	0	73
TRANSFER	5	2	45.68999862999998	268.7600097999998	Late delivery	1	73
TRANSFER	4	2	21.76000022999999	262.2000122	Late delivery	1	73
DEBIT	2	1	24.57999991999999	245.8099976	Late delivery	1	73
TRANSFER	2	1	16.38999939	327.75	Late delivery	1	73
TRANSFER	4	2	22.37000083999999	298.25	Late delivery	1	73
DEBIT	1	0	35	309.7200012000001	Late delivery	1	73
PAYOUTMENT	1	0	143.1600037	298.25	Late delivery	1	73

6) Extracting data from one db table to another db table

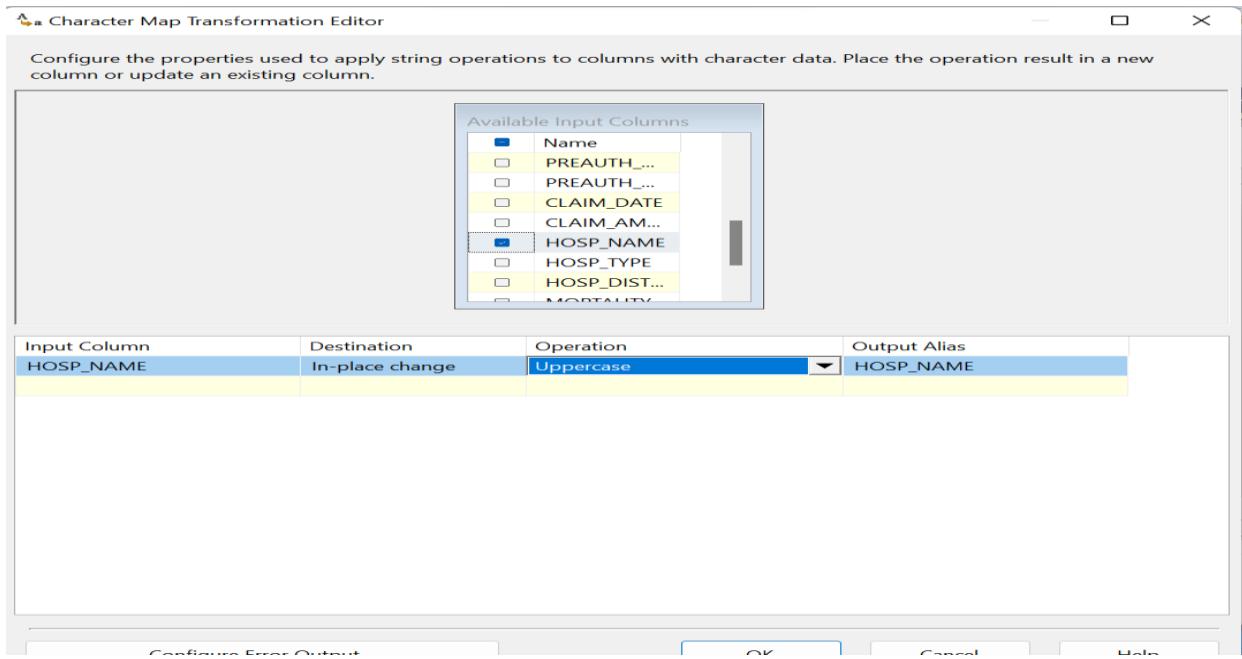
1) Data flow task



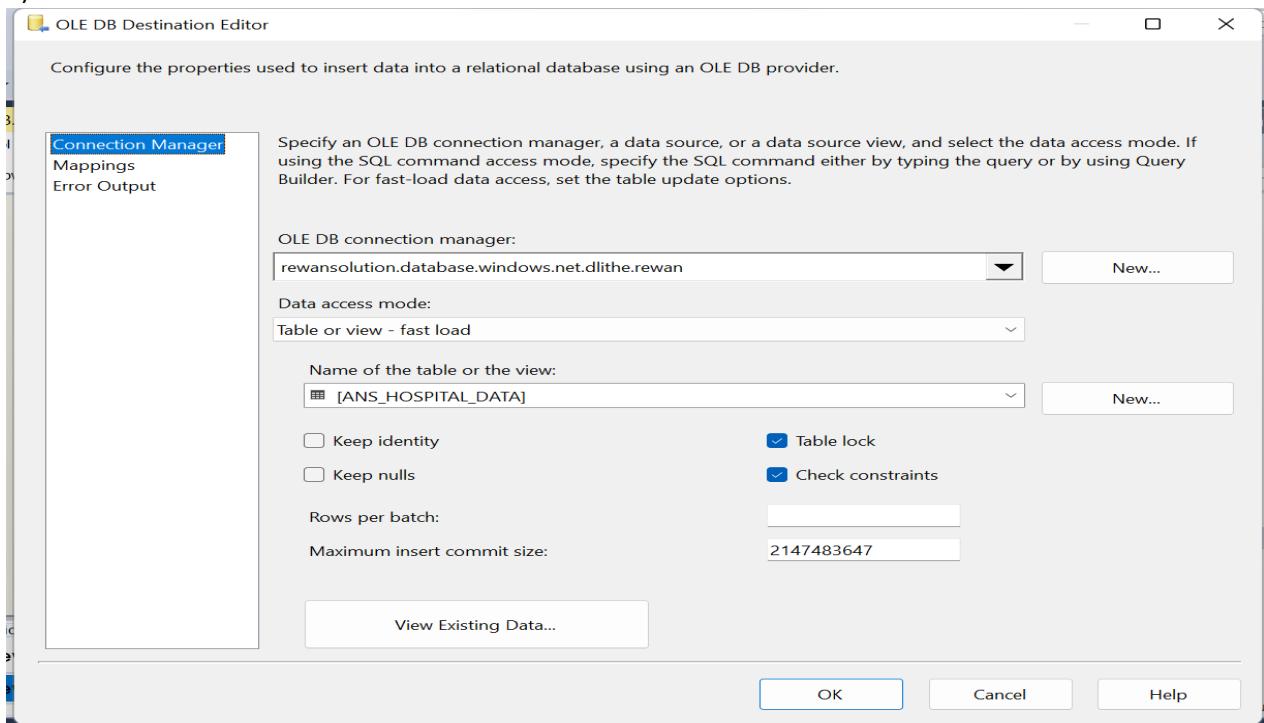
2) Source Connections



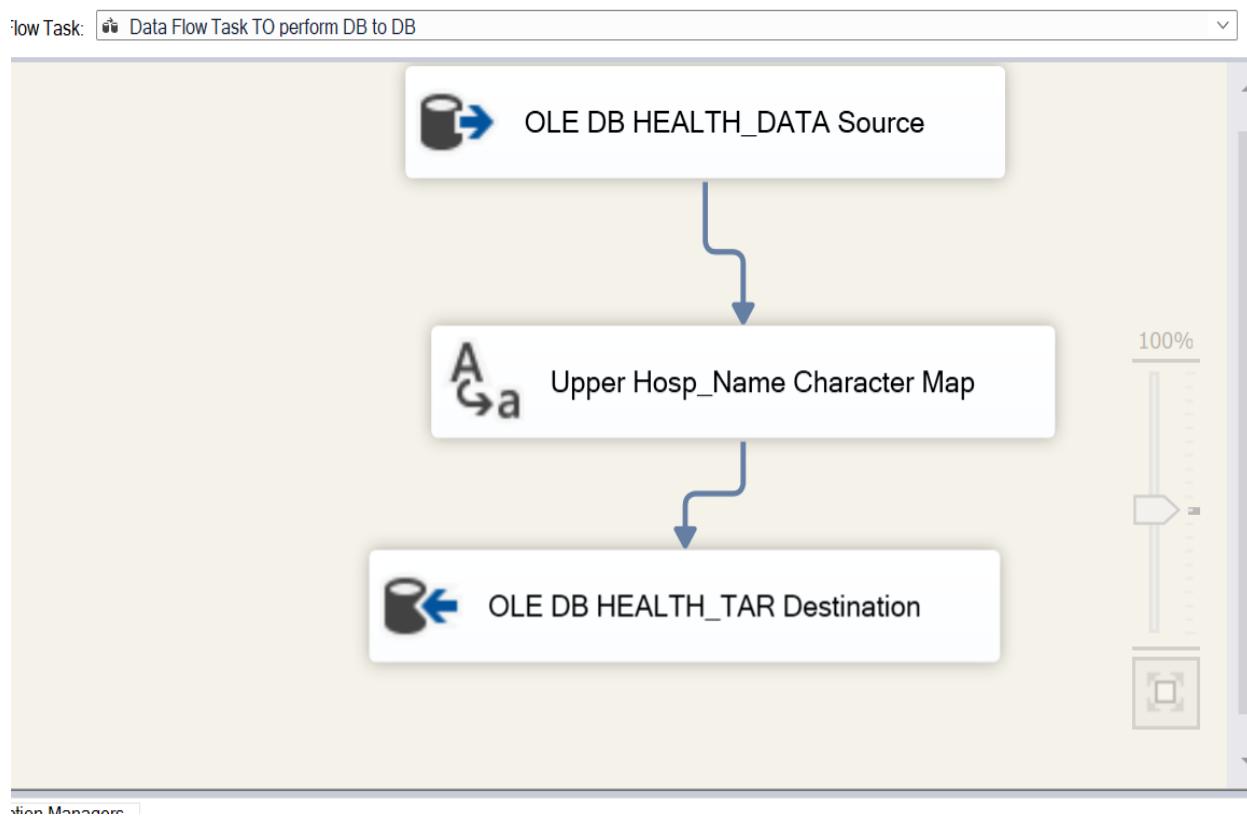
3) Character map transformation to change hospital name to uppercase



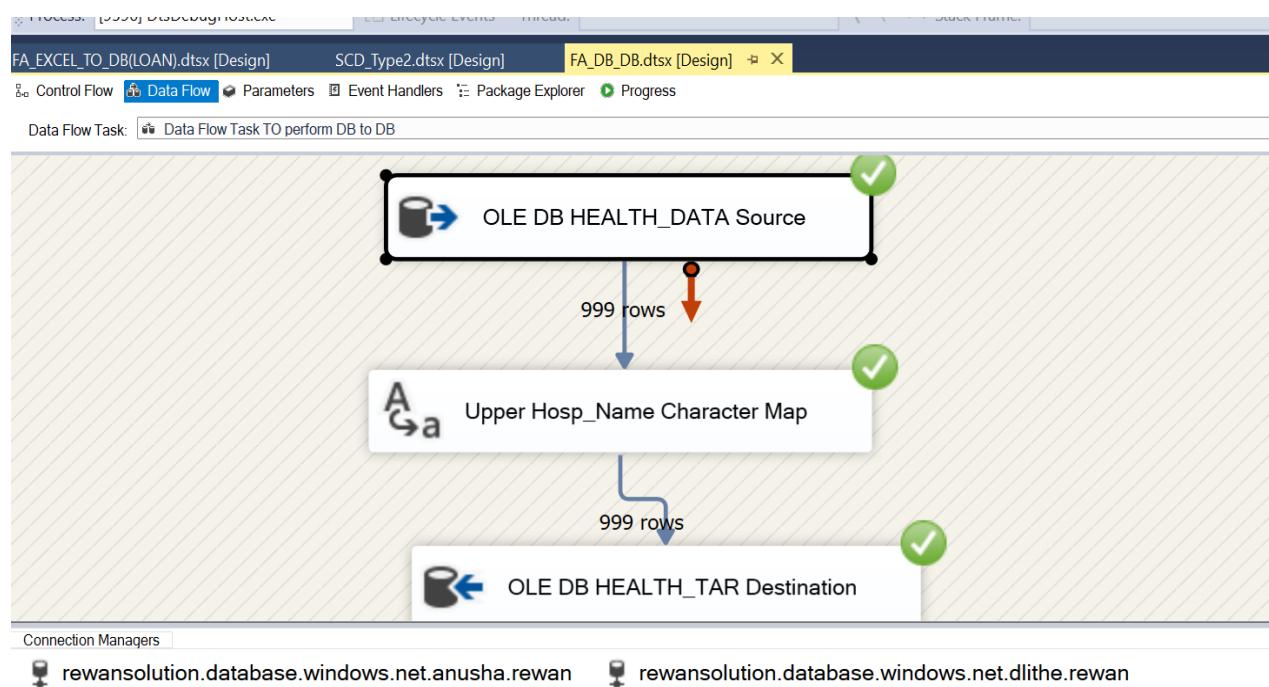
4) Destination table



5) Dataflow



7) Results



-----DB TO DB-----

SELECT * FROM ANS HOSPITAL DATA

Results 4 ×

SELECT * FROM ANS_HOSPITAL_DATA

	PID	AGE	GENDER	CASTE_NAME	HOSP_NAME	CATEGORY_CODE	CATEGORY_NAME
1	1	56	Female	OBC	RIMS GOVT. GENERAL HOSPITAL, SRIKAKULAM	M111	NEPHROLOGY
2	2	37	Male	BC	RIMS GOVT. GENERAL HOSPITAL, SRIKAKULAM	M111	NEPHROLOGY
3	3	50	Male	BC	RIMS GOVT. GENERAL HOSPITAL, SRIKAKULAM	M111	NEPHROLOGY
4	4	45	Male	BC	RIMS GOVT. GENERAL HOSPITAL, SRIKAKULAM	M111	NEPHROLOGY
5	5	54	Male	BC	RIMS GOVT. GENERAL HOSPITAL, SRIKAKULAM	M111	NEPHROLOGY
6	6	35	Male	OC	RIMS GOVT. GENERAL HOSPITAL, SRIKAKULAM	M111	NEPHROLOGY
7	7	52	Male	OC	GOVT GENERAL HOSPITAL KURNOOL	M111	NEPHROLOGY
8	8	73	Male	BC	QUEENS NRI HOSPITALS	M111	NEPHROLOGY
9	9	56	Male	OC	KARUMURI HOSPITAL	S7	CARDIAC AND CARDIOTHORACIC SURGERY
10	10	49	Male	OC	KARUMURI HOSPITAL	S7	CARDIAC AND CARDIOTHORACIC SURGERY
11	11	52	Male	BC	QUEENS NRI HOSPITALS	M111	NEPHROLOGY
12	12	56	Male	SC	KARUMURI HOSPITAL	M5	CARDIOLOGY
13	13	65	Female	SC	KARUMURI HOSPITAL	M5	CARDIOLOGY
14	14	75	Male	OC	KARUMURI HOSPITAL	M5	CARDIOLOGY
15	15	52	Male	OC	KARUMURI HOSPITAL	M5	CARDIOLOGY
16	16	56	Male	Minorities	KARUMURI HOSPITAL	M5	CARDIOLOGY
17	17	1	Male(Child)	OC	ENT NURSING HOME	S16	COCHLEAR IMPLANT SURGERY
18	18	54	Female	SC	KARUMURI HOSPITAL	S7	CARDIAC AND CARDIOTHORACIC SURGERY
19	19	48	Male	OC	KARUMURI HOSPITAL	S7	CARDIAC AND CARDIOTHORACIC SURGERY
20	20	57	Female	OC	KARUMURI HOSPITAL	M5	CARDIOLOGY

Save Cancel Script | 200+ Rows: 1 200 row(s) fetched - 292ms (16ms fetch), on 2022-10-20 IST | en | Writable | Smart Insert | 54 : 1 : 1641 | Sel: 0 | 0 | ...