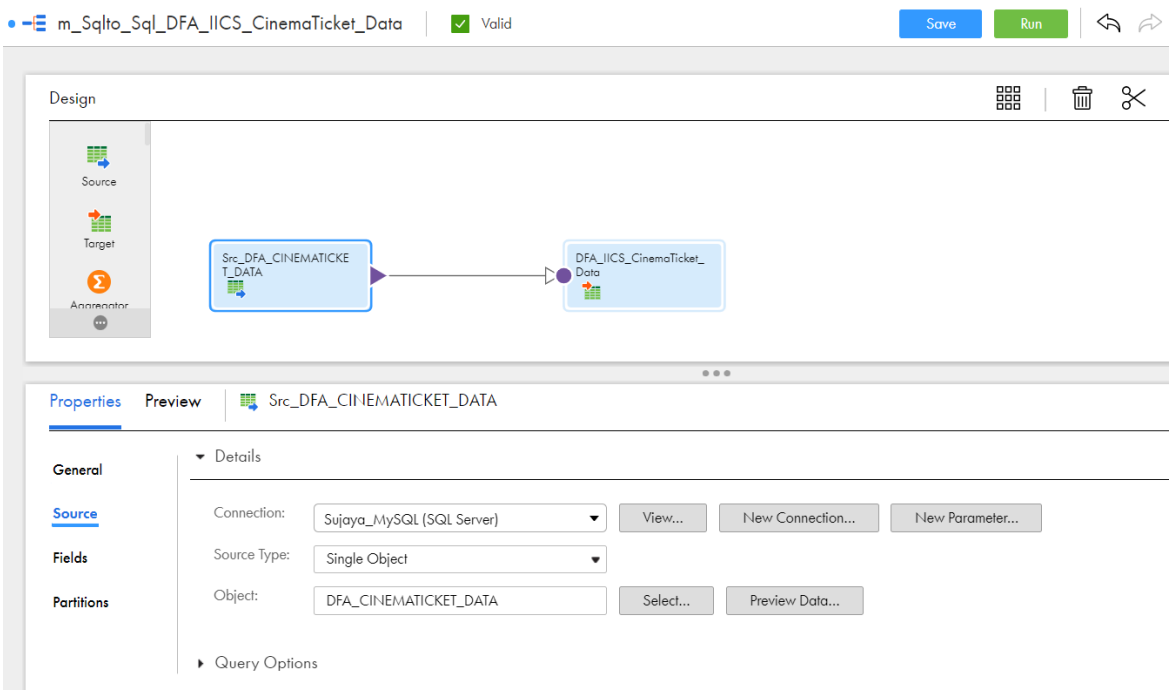
Module-4 IICS

Make connection to different data source (Oracle DB, Flat file, SQL Server)

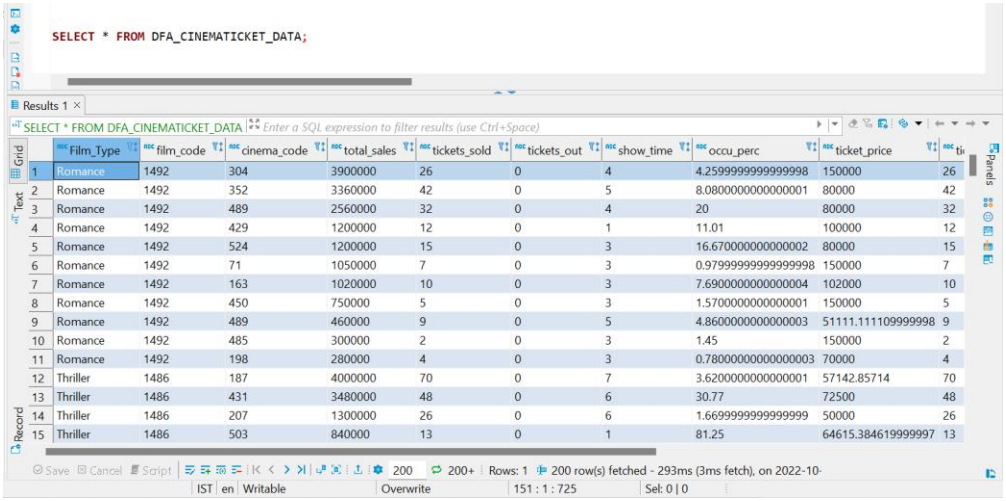
Extract, Transform and Load to new target system - SQL Server

Extract data from SQL and Load to SQL

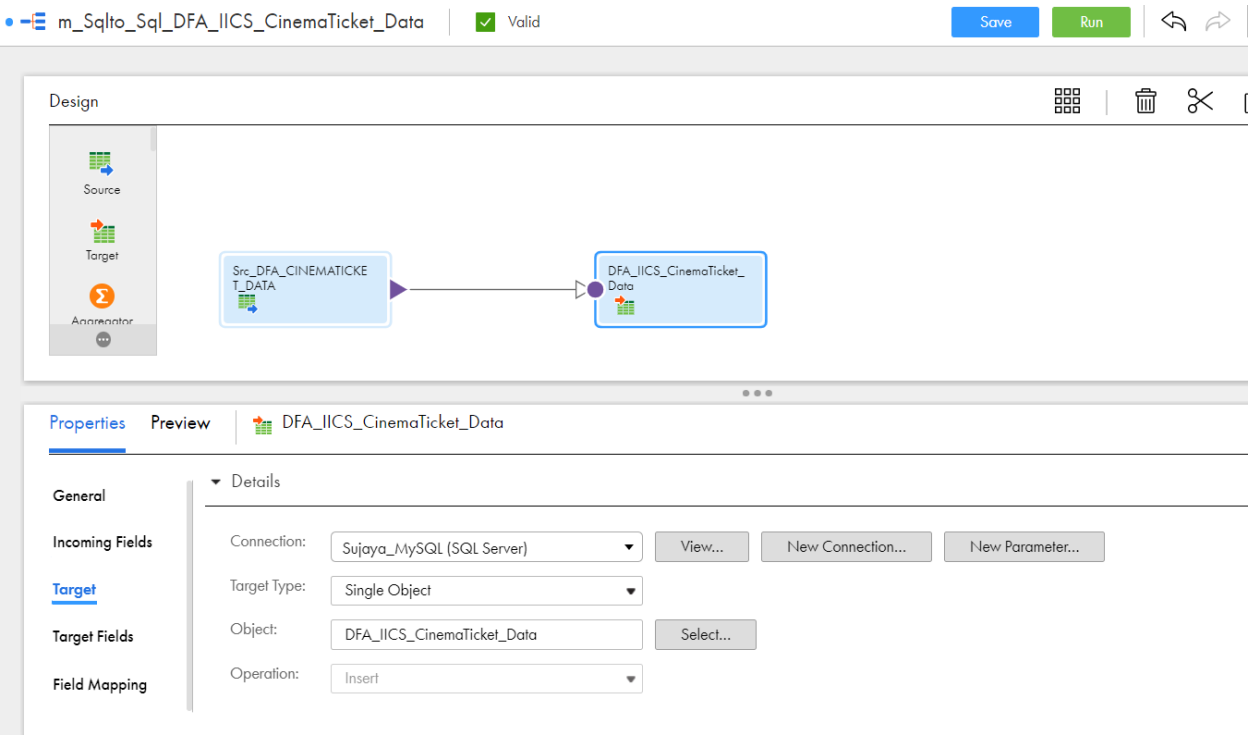
Step1: Make the Connection to database and select the source table in object .



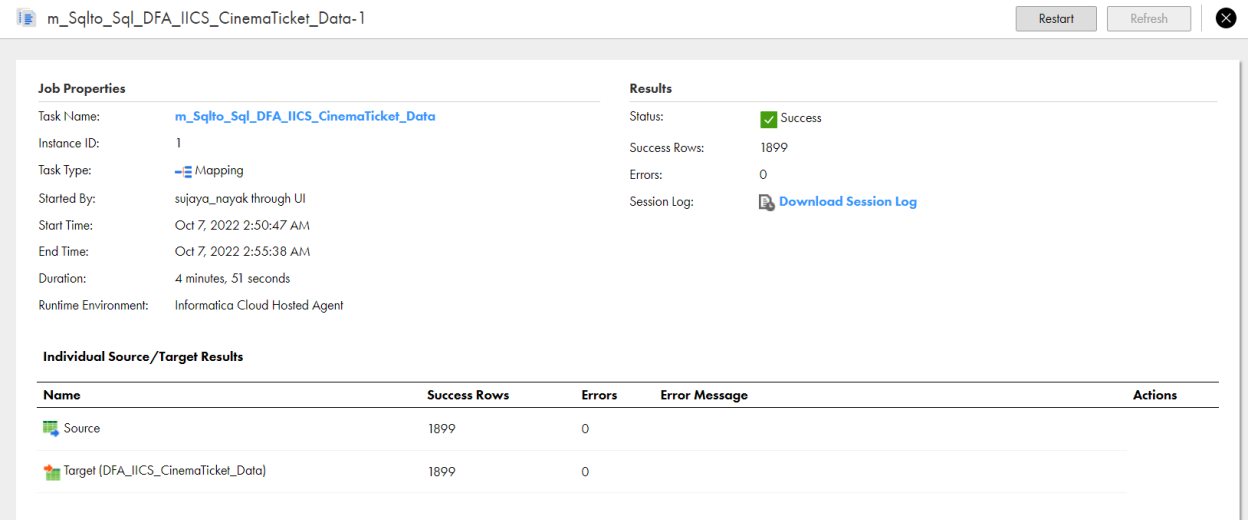
Source Table:



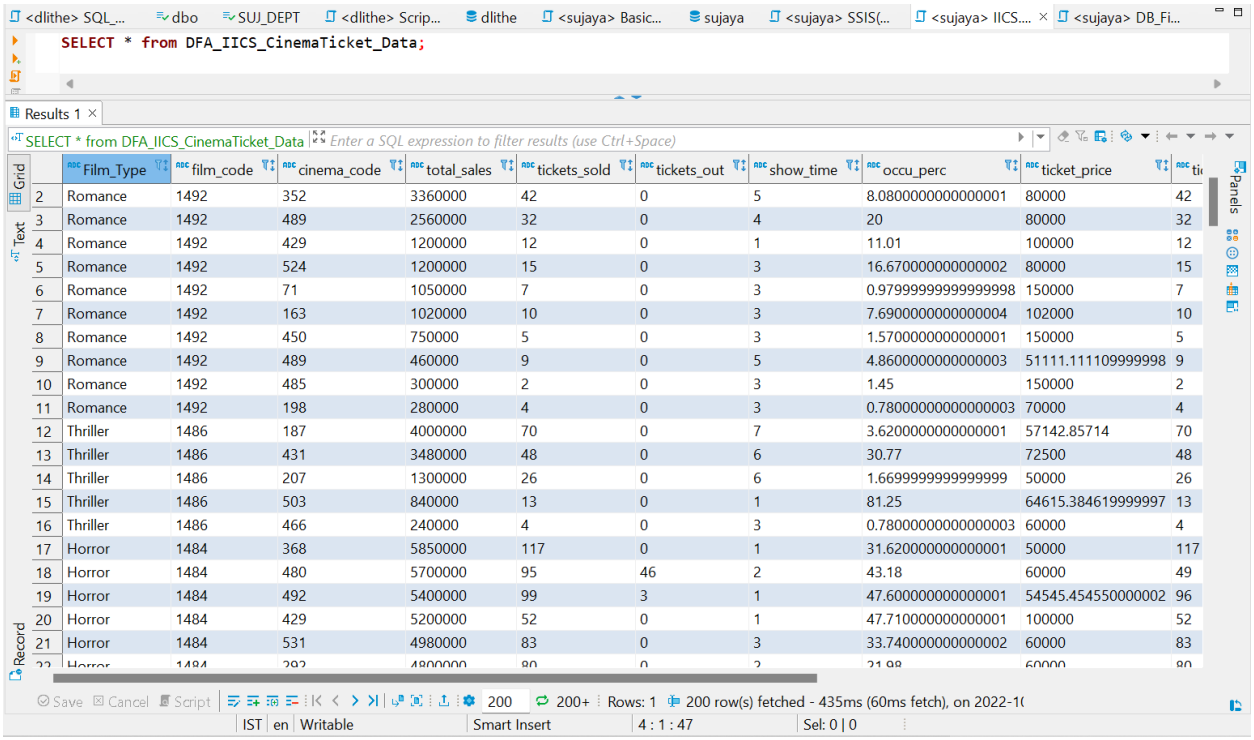
Step2: Connect the source to Target. And make the target connection to database and create the target table .



Step3:Save and Run the Mapping.



Step4: Check in database whether data has loaded to the target table.



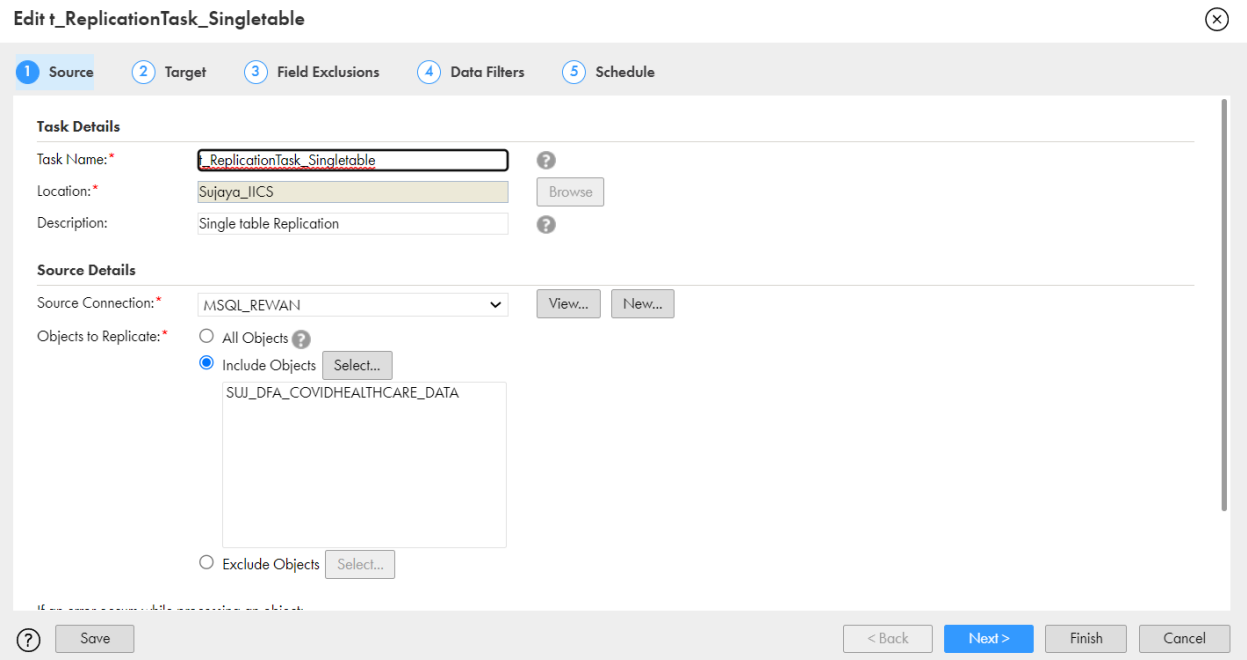
	Film_Type	film_code	cinema_code	total_sales	tickets_sold	tickets_out	show_time	occu_perc	ticket_price	ti
2	Romance	1492	352	3360000	42	0	5	8.0800000000000001	80000	42
3	Romance	1492	489	2560000	32	0	4	20	80000	32
4	Romance	1492	429	1200000	12	0	1	11.01	100000	12
5	Romance	1492	524	1200000	15	0	3	16.670000000000002	80000	15
6	Romance	1492	71	1050000	7	0	3	0.97999999999999998	150000	7
7	Romance	1492	163	1020000	10	0	3	7.6900000000000004	102000	10
8	Romance	1492	450	750000	5	0	3	1.5700000000000001	150000	5
9	Romance	1492	489	460000	9	0	5	4.8600000000000003	51111.111109999998	9
10	Romance	1492	485	300000	2	0	3	1.45	150000	2
11	Romance	1492	198	280000	4	0	3	0.78000000000000003	70000	4
12	Thriller	1486	187	4000000	70	0	7	3.6200000000000001	57142.85714	70
13	Thriller	1486	431	3480000	48	0	6	30.77	72500	48
14	Thriller	1486	207	1300000	26	0	6	1.6699999999999999	50000	26
15	Thriller	1486	503	840000	13	0	1	81.25	64615.384619999997	13
16	Thriller	1486	466	240000	4	0	3	0.78000000000000003	60000	4
17	Horror	1484	368	5850000	117	0	1	31.620000000000001	50000	117
18	Horror	1484	480	5700000	95	46	2	43.18	60000	49
19	Horror	1484	492	5400000	99	3	1	47.600000000000001	54545.454550000002	96
20	Horror	1484	429	5200000	52	0	1	47.710000000000001	100000	52
21	Horror	1484	531	4980000	83	0	3	33.740000000000002	60000	83
22	Horror	1484	292	4800000	80	0	2	21.98	60000	80

Create data replication task (single table and FULL DB)

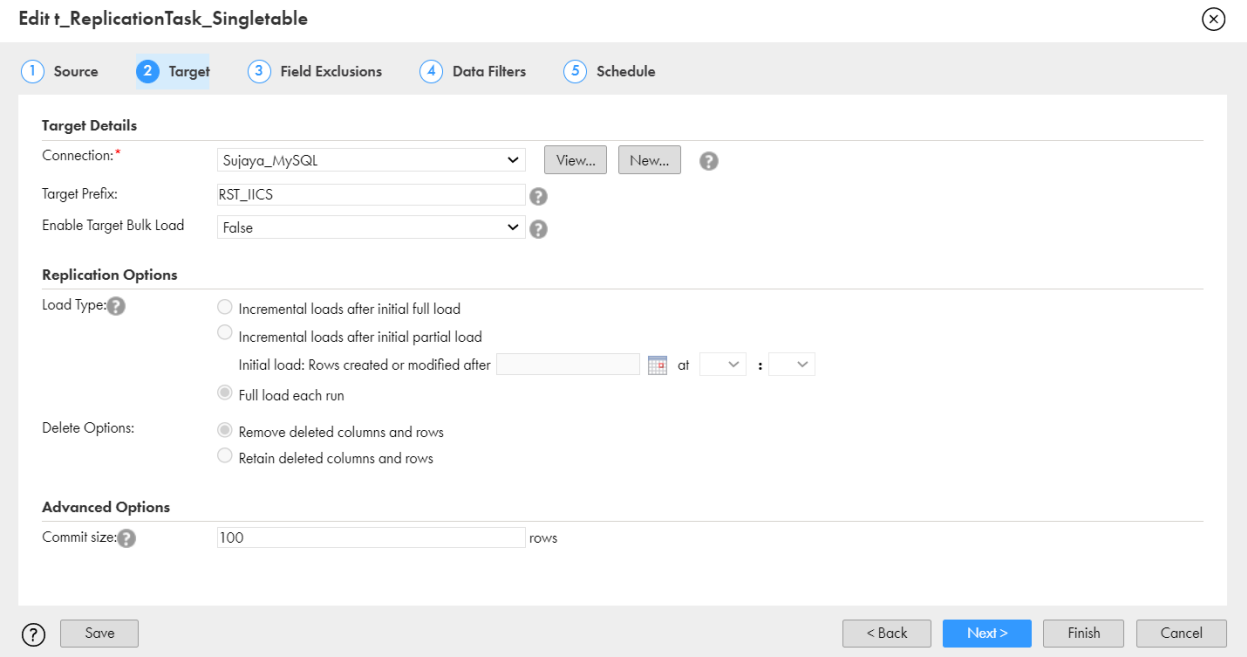
Replication Task

Single Table Replication

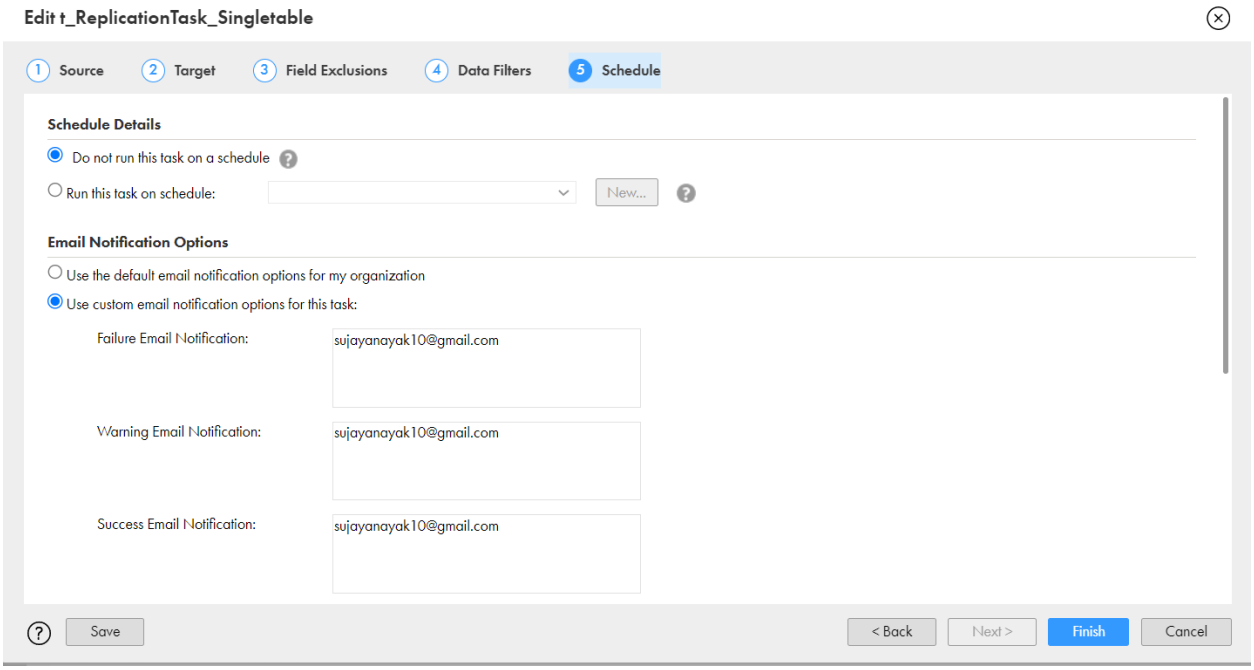
Step1: Give the Task Name and Make the source connection to database and select single Table which are needs to be Replicated to another database.



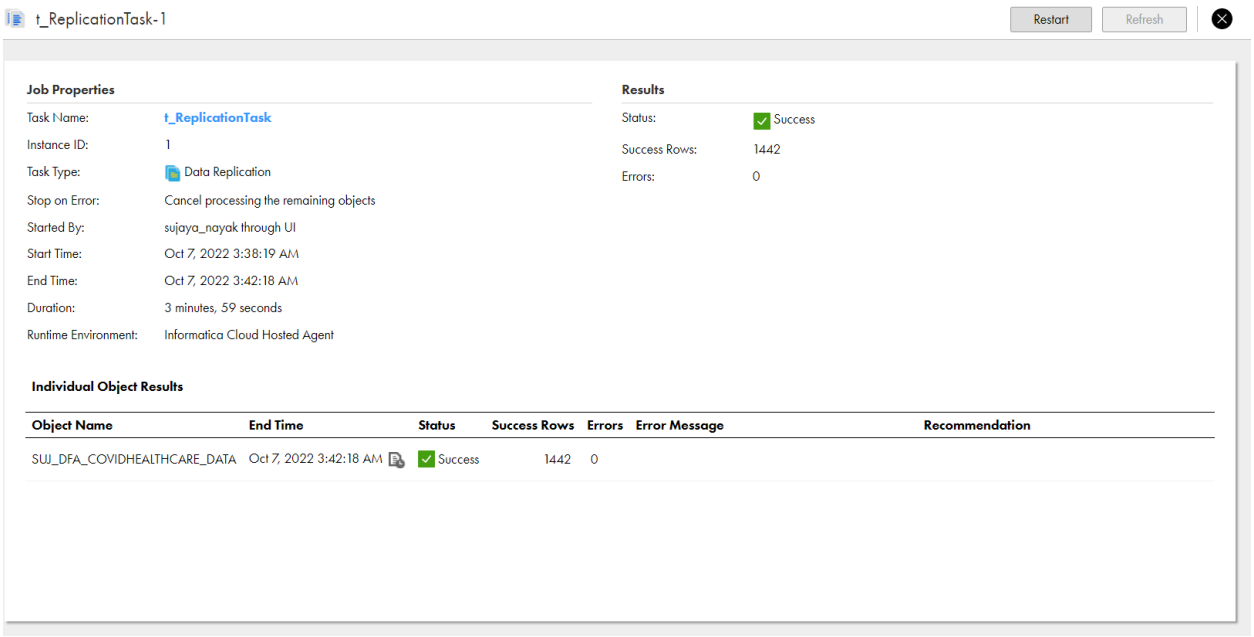
Step2: Click on Target and make the target database connection and provide the Target Prefix for the table that has to be replicated.



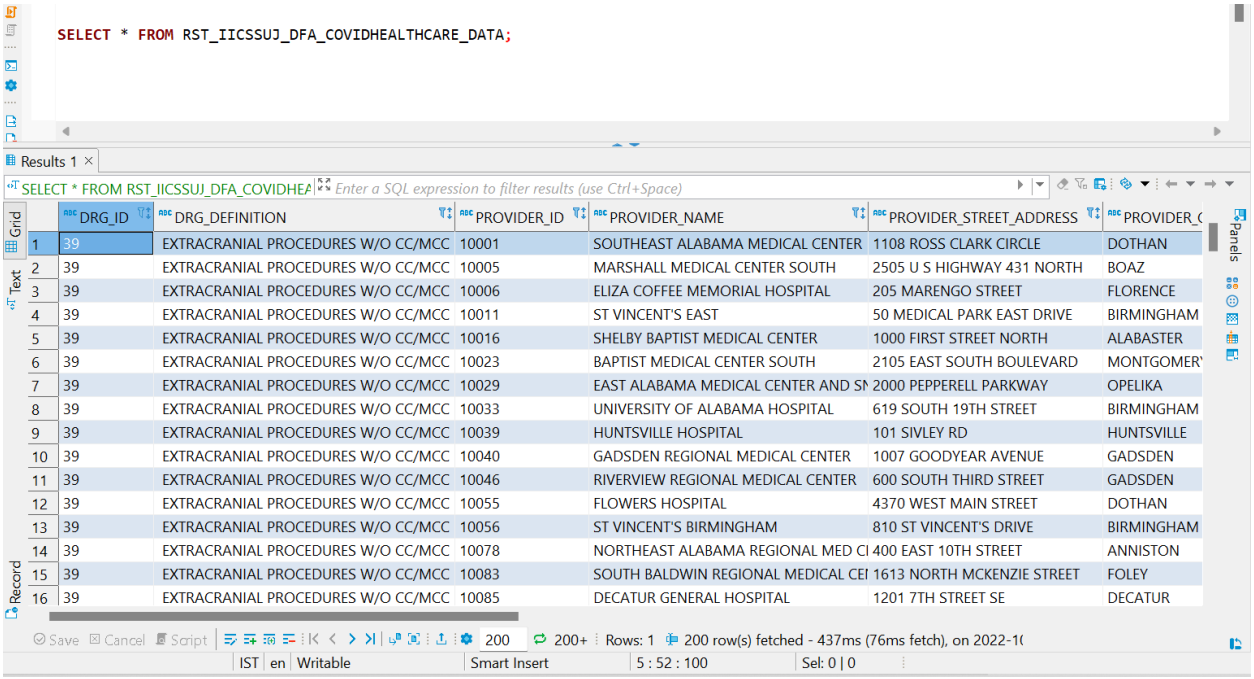
Step3:Go to Schedule select the preferred schedule type and provide email for Status notification. And Click Finish.



Step4:Save and Run the Mapping.

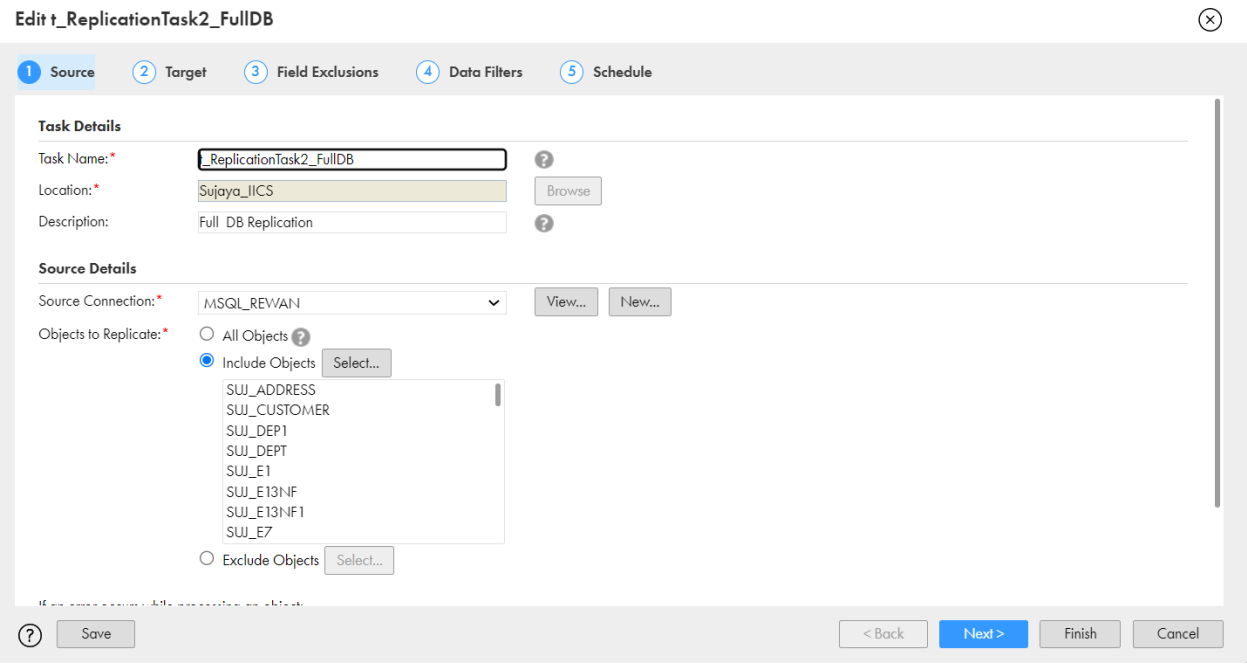


Step5: Check in database whether the table has replicated to the database.

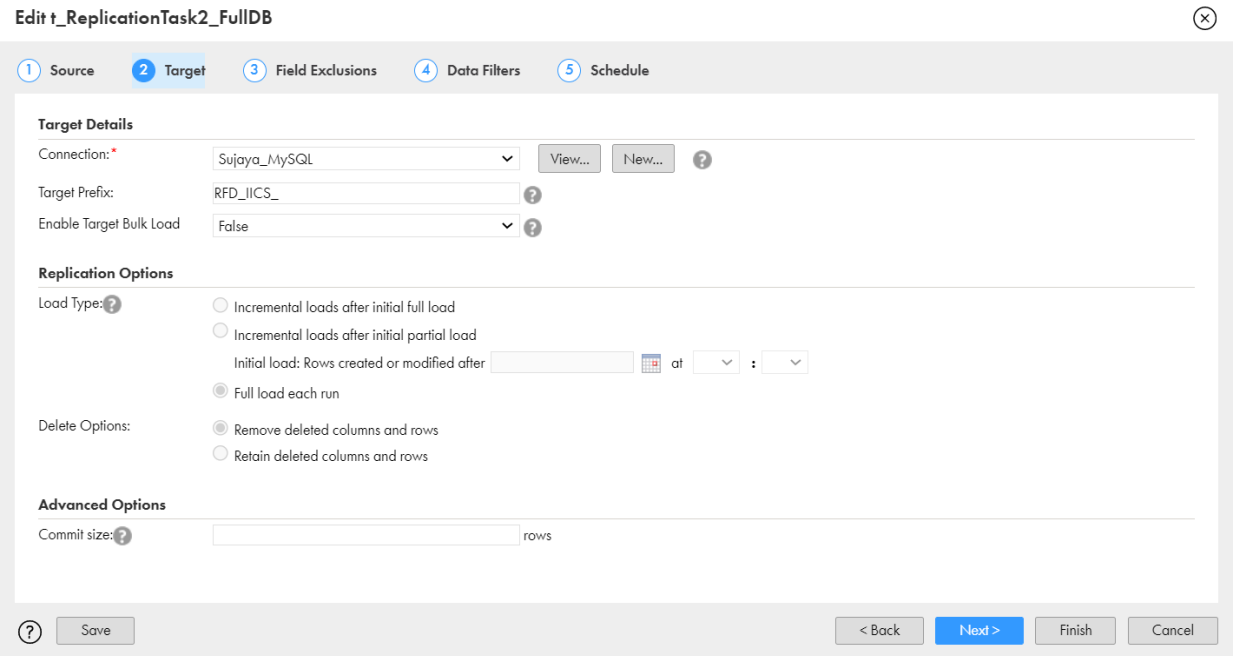


Full DB Replication

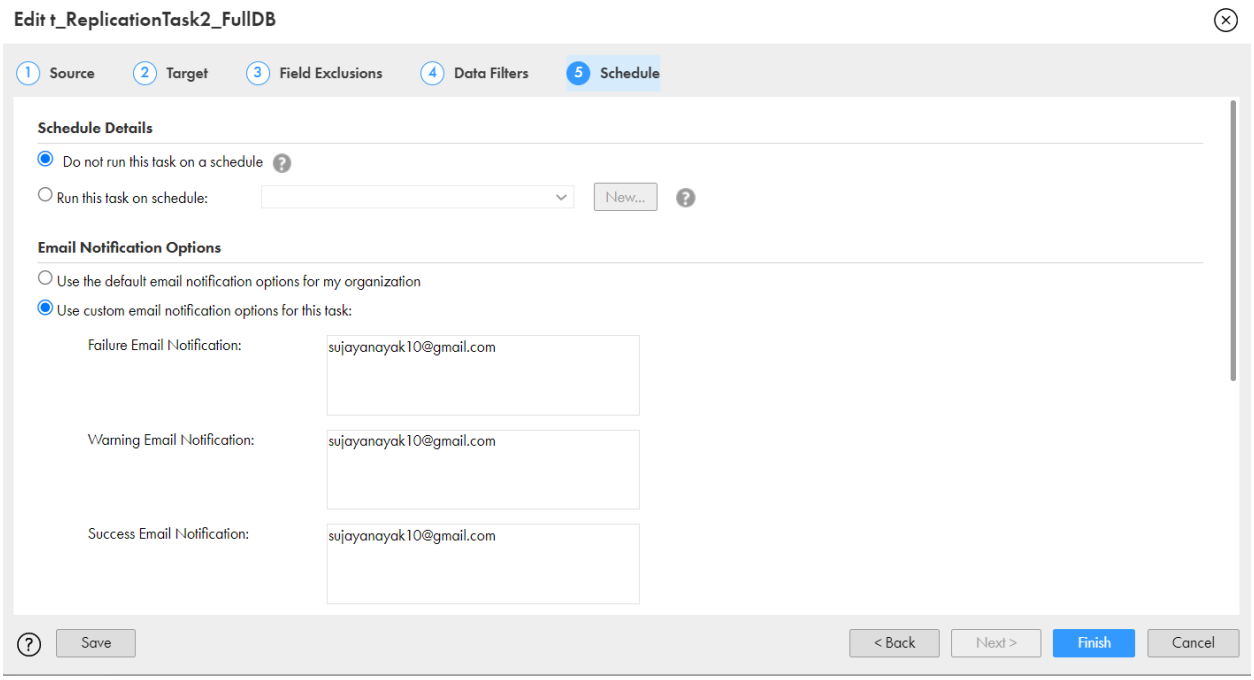
Step1: Step1: Give the Task Name .Make the source connection to database and select Multiple Tables which are needs to be Replicated to another database.



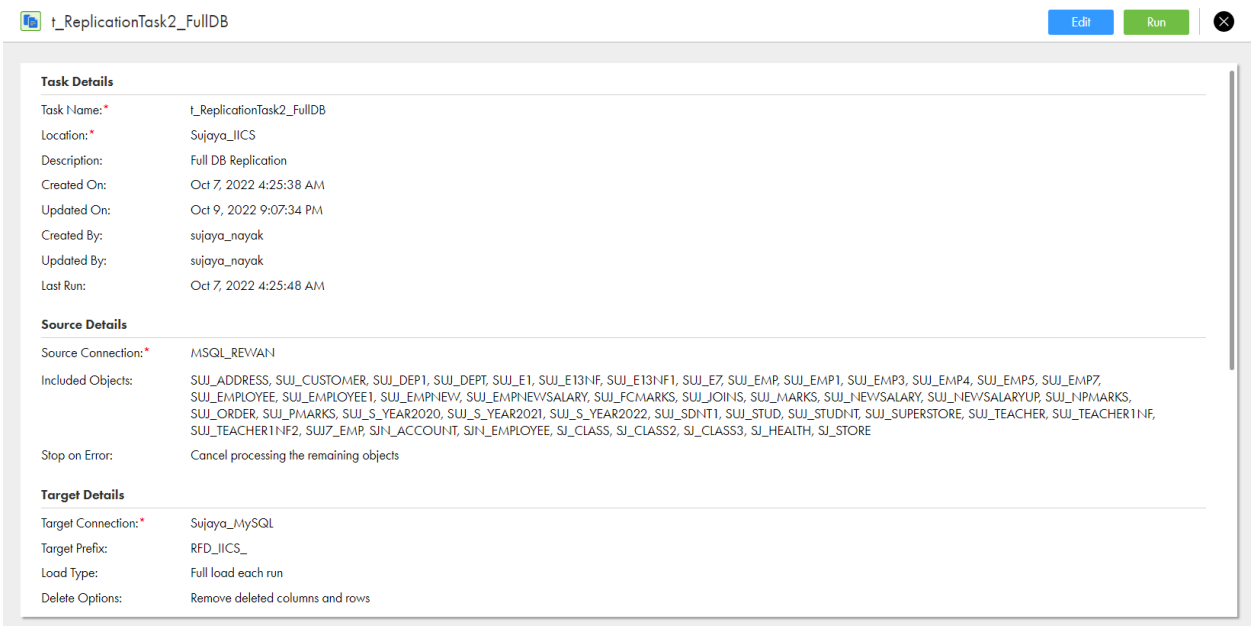
Step2: Click on Target and make the target database connection and provide the Target Prefix for the table that has to be replicated.



Step3:Go to Schedule select the preferred schedule type and provide email for Status notification. And Click Finish.

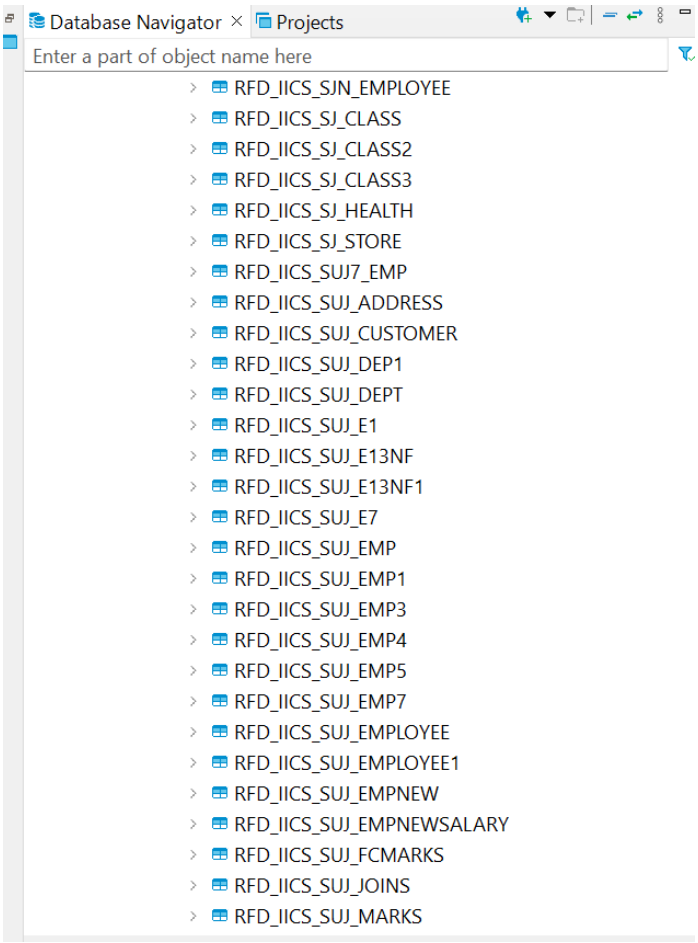


Step4:Save and Run the Mapping.



Step5: Check in database whether the table has replicated to the database.

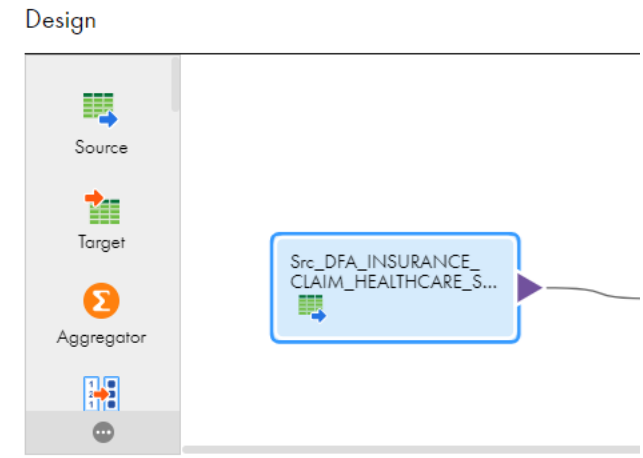
Replicated Tables in Database.

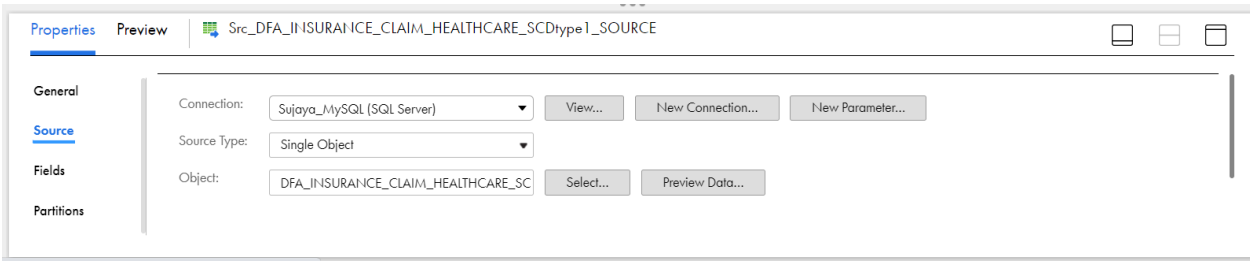

Database Navigator
Projects
Enter a part of object name here
RFD_IICS_SJN_EMPLOYEE
RFD_IICS_SJ_CLASS
RFD_IICS_SJ_CLASS2
RFD_IICS_SJ_CLASS3
RFD_IICS_SJ_HEALTH
RFD_IICS_SJ_STORE
RFD_IICS_SUJ7_EMP
RFD_IICS_SUJ_ADDRESS
RFD_IICS_SUJ_CUSTOMER
RFD_IICS_SUJ_DEP1
RFD_IICS_SUJ_DEPT
RFD_IICS_SUJ_E1
RFD_IICS_SUJ_E13NF
RFD_IICS_SUJ_E13NF1
RFD_IICS_SUJ_E7
RFD_IICS_SUJ_EMP
RFD_IICS_SUJ_EMP1
RFD_IICS_SUJ_EMP3
RFD_IICS_SUJ_EMP4
RFD_IICS_SUJ_EMP5
RFD_IICS_SUJ_EMP7
RFD_IICS_SUJ_EMPLOYEE
RFD_IICS_SUJ_EMPLOYEE1
RFD_IICS_SUJ_EMPNEW
RFD_IICS_SUJ_EMPNEWSALARY
RFD_IICS_SUJ_FCMARKS
RFD_IICS_SUJ_JOINS
RFD_IICS_SUJ_MARKS

Perform SCD 1 & SCD2 dimension table modelling

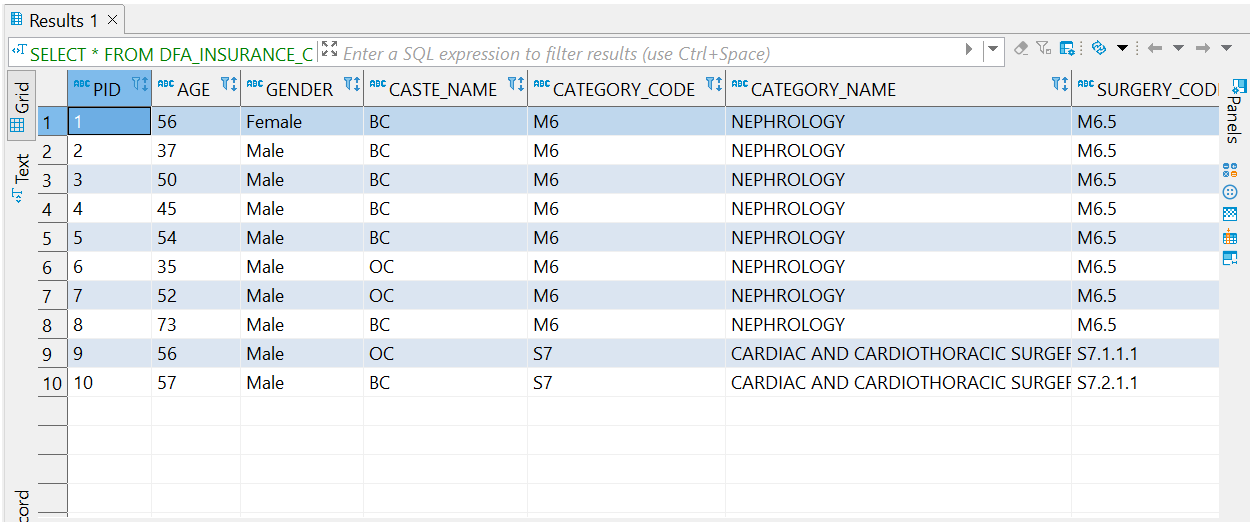
Scd-1

Step1:Select source and make the connection to Database and select the table in object.



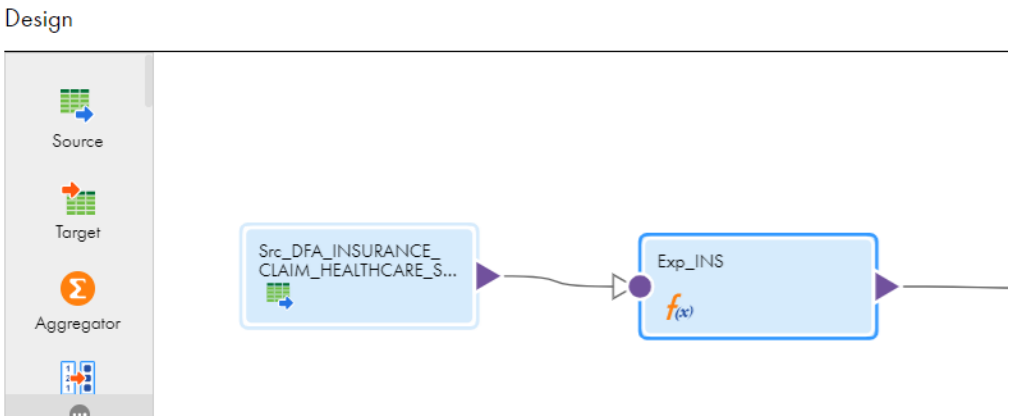


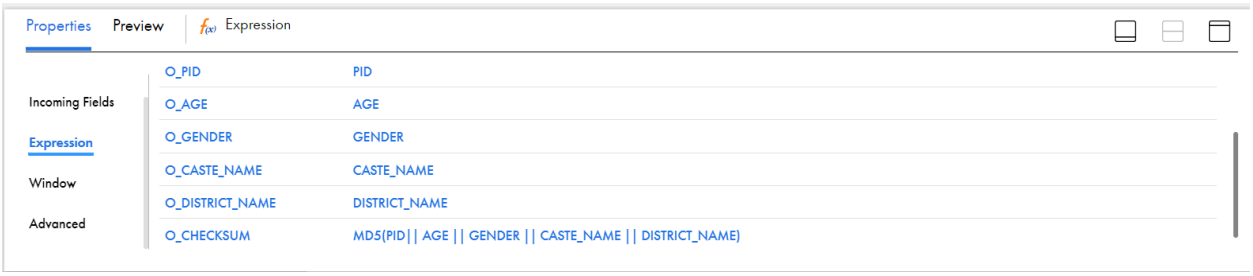
Source Table:



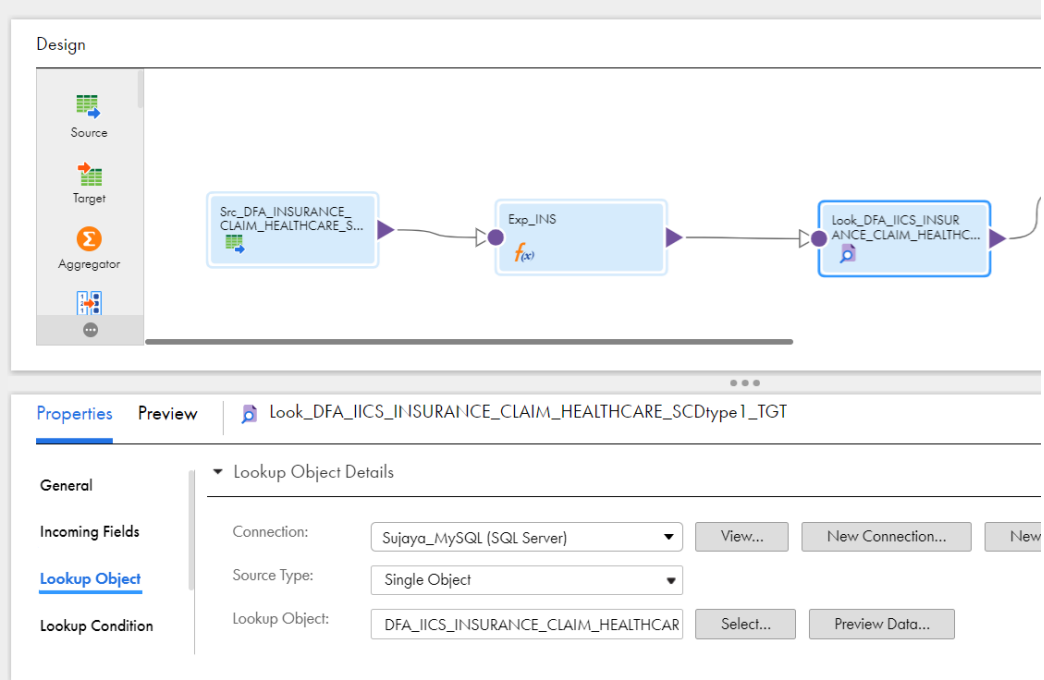
	PID	AGE	GENDER	CASTE_NAME	CATEGORY_CODE	CATEGORY_NAME	SURGERY_COD
1	1	56	Female	BC	M6	NEPHROLOGY	M6.5
2	2	37	Male	BC	M6	NEPHROLOGY	M6.5
3	3	50	Male	BC	M6	NEPHROLOGY	M6.5
4	4	45	Male	BC	M6	NEPHROLOGY	M6.5
5	5	54	Male	BC	M6	NEPHROLOGY	M6.5
6	6	35	Male	OC	M6	NEPHROLOGY	M6.5
7	7	52	Male	OC	M6	NEPHROLOGY	M6.5
8	8	73	Male	BC	M6	NEPHROLOGY	M6.5
9	9	56	Male	OC	S7	CARDIAC AND CARDIOTHORACIC SURGEF	S7.1.1.1
10	10	57	Male	BC	S7	CARDIAC AND CARDIOTHORACIC SURGEF	S7.2.1.1

Step2:Drag and Drop the Expression and connect the source to expression. And click on Expression. Create the required fields and Validate the expression. Create the field Check Sum using MD5 function.

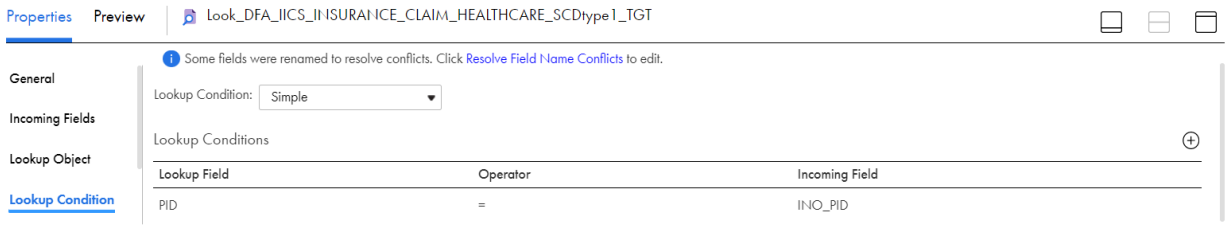




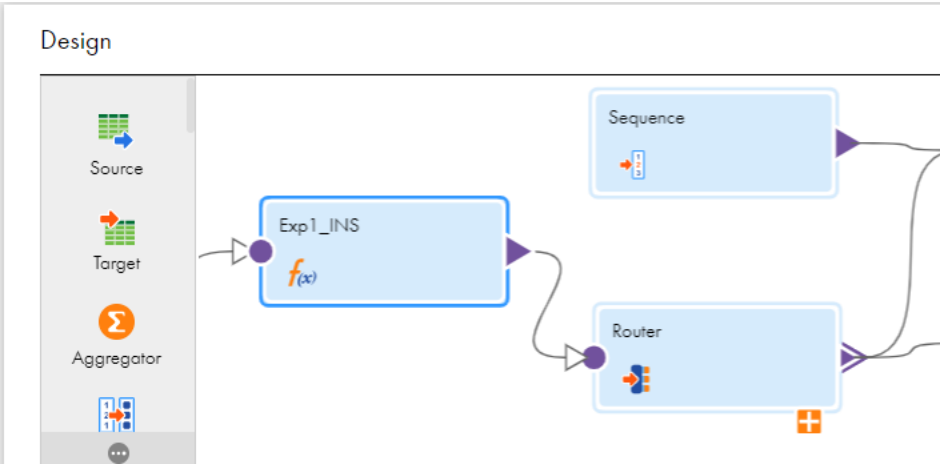
Step3:Drag and Drop Lookup and connect the Expression to Lookup. And click on Lookup object and make the connection to database and select the target table.



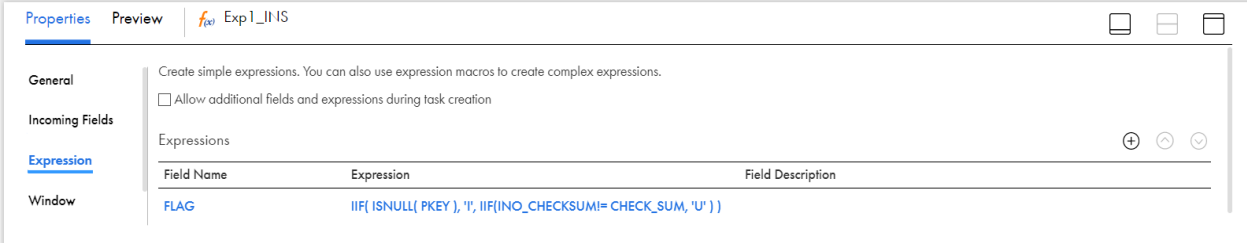
Step4: Click on Lookup condition and give the Lookup condition.



Step5:Drag and Drop Expression ,Router and Sequence.



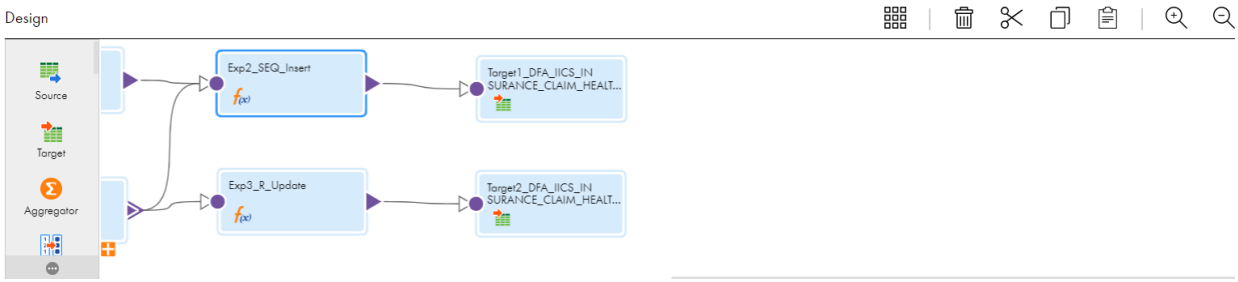
Step6:Create new Field FLAG and create the Expression and Validate the expression.



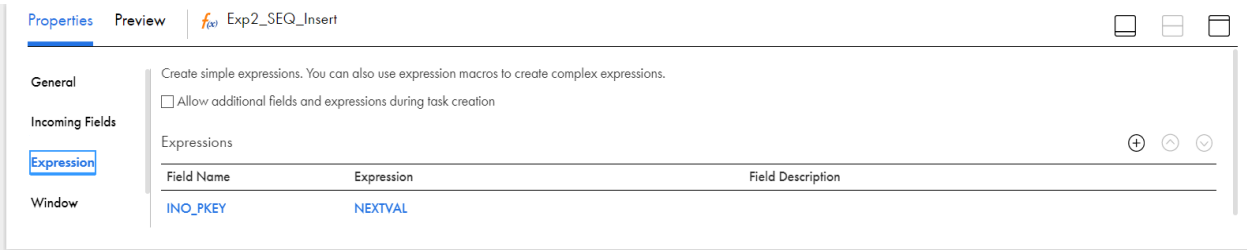
Step7:Click on Sequence and check the Generated Fields.

Step8: Click on Router and Generate the Output Group Insert and Update.

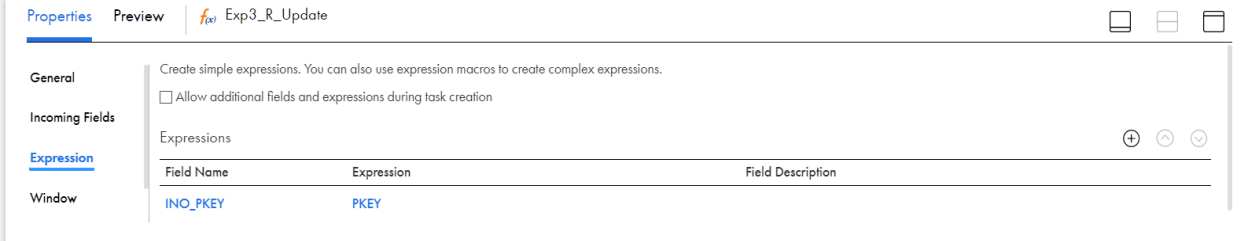
Step9:Drag and Drop two Expression and Connect Output of Sequence and Router to one Expression and another output to the other Expression.



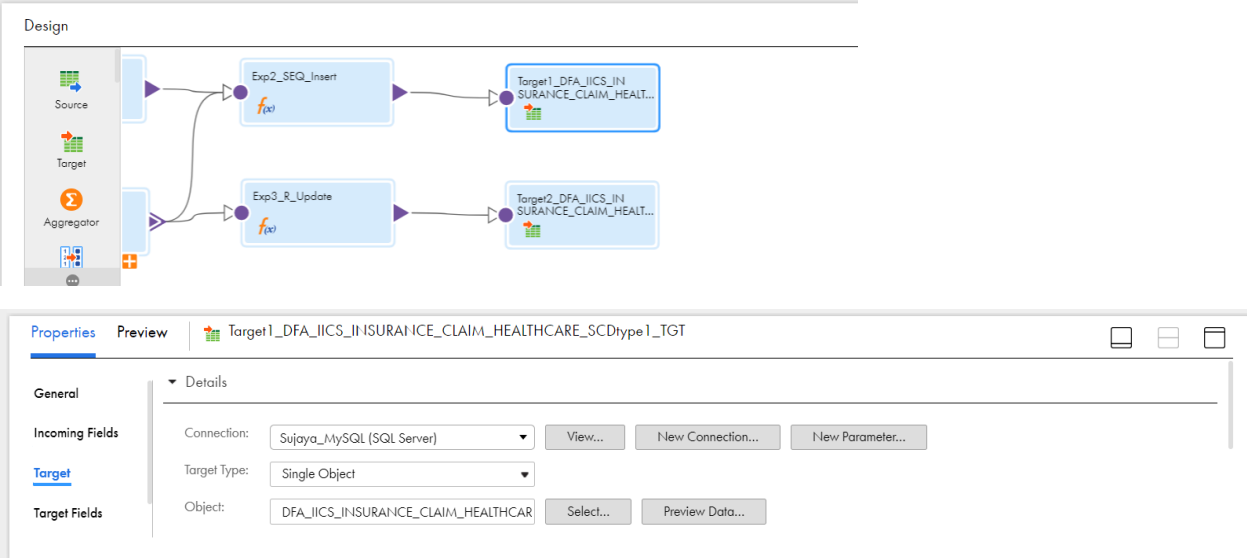
Step10: Click on Expression2 and generate Expression and Validate the Expression.



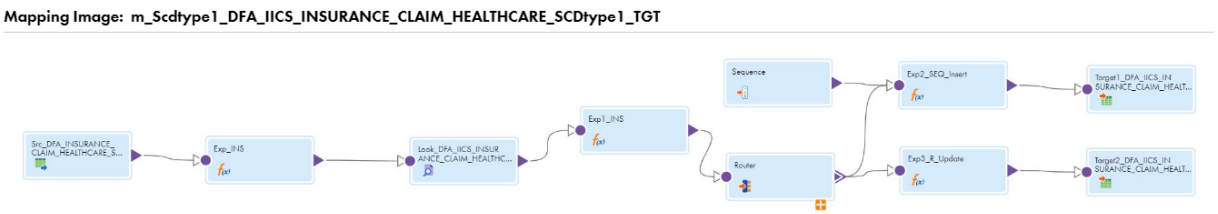
Step11: Click on Expression3 and generate Expression and Validate the Expression.



Step12: Connect the output of Expression2 to Target1 and output of Expression3 to Target2. And Click on Target and make the connection to Database and select the target table.



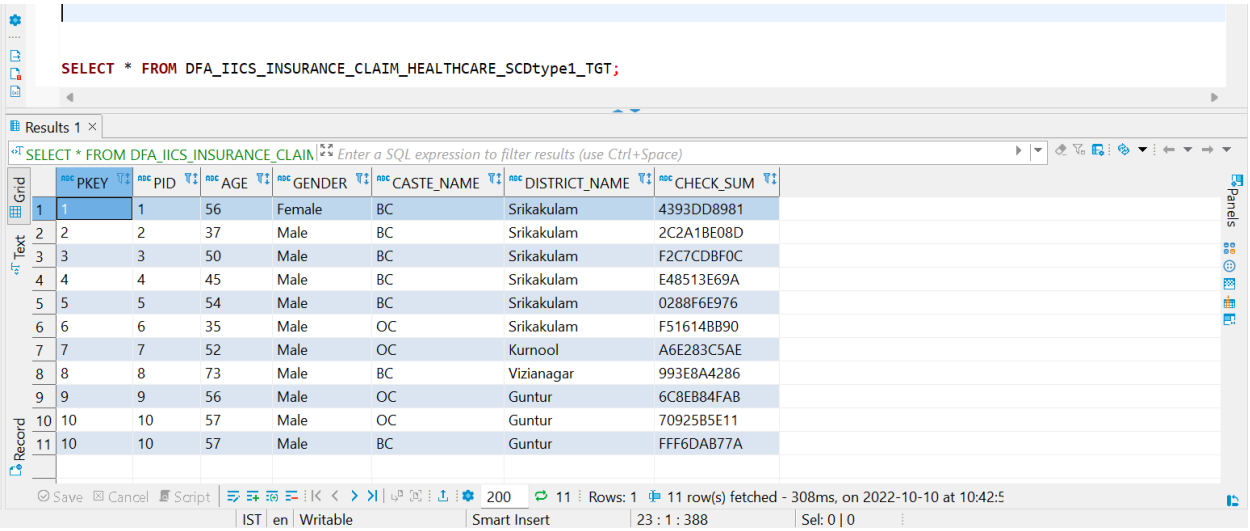
Step13:Save and Run the mapping.



Step14: Check in Database whether the data has loaded to destination table. Update the Source table and run the mapping again.

```
update DFA_INSURANCE_CLAIM_HEALTHCARE_SCDtype1_SOURCE
set CASTE_NAME='BC'
where pid=10;
```

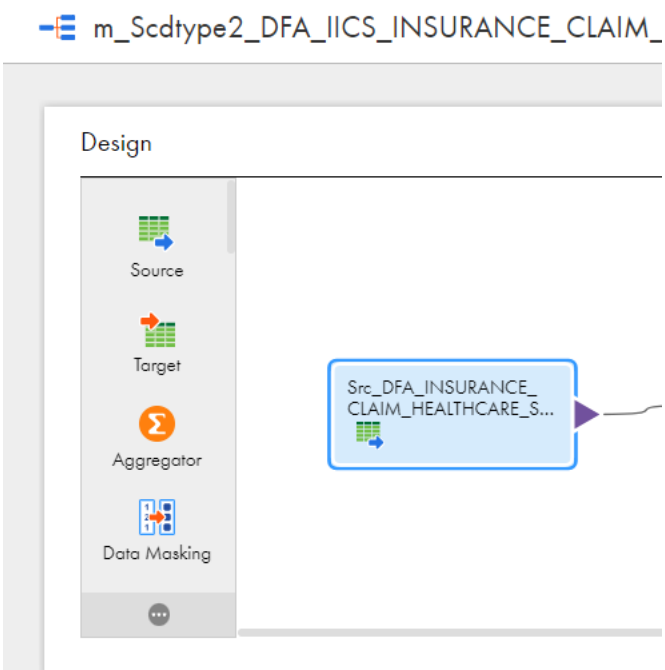
Step15: Check in database to view the updated record.

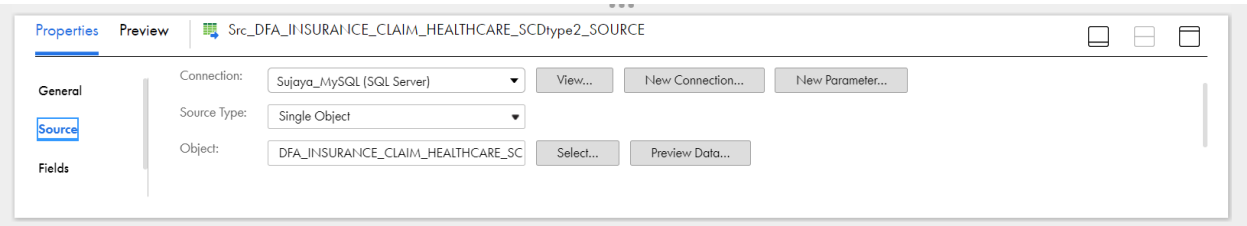


	PKEY	PID	AGE	GENDER	CASTE_NAME	DISTRICT_NAME	CHECK_SUM
1	1	1	56	Female	BC	Srikakulam	4393DD8981
2	2	2	37	Male	BC	Srikakulam	2C2A1BE08D
3	3	3	50	Male	BC	Srikakulam	F2C7CDBF0C
4	4	4	45	Male	BC	Srikakulam	E48513E69A
5	5	5	54	Male	BC	Srikakulam	0288F6E976
6	6	6	35	Male	OC	Srikakulam	F51614BB90
7	7	7	52	Male	OC	Kurnool	A6E283C5AE
8	8	8	73	Male	BC	Vizianagar	993E8A4286
9	9	9	56	Male	OC	Guntur	6C8EB84FAB
10	10	10	57	Male	OC	Guntur	70925B5E11
11	10	10	57	Male	BC	Guntur	FFF6DAB77A

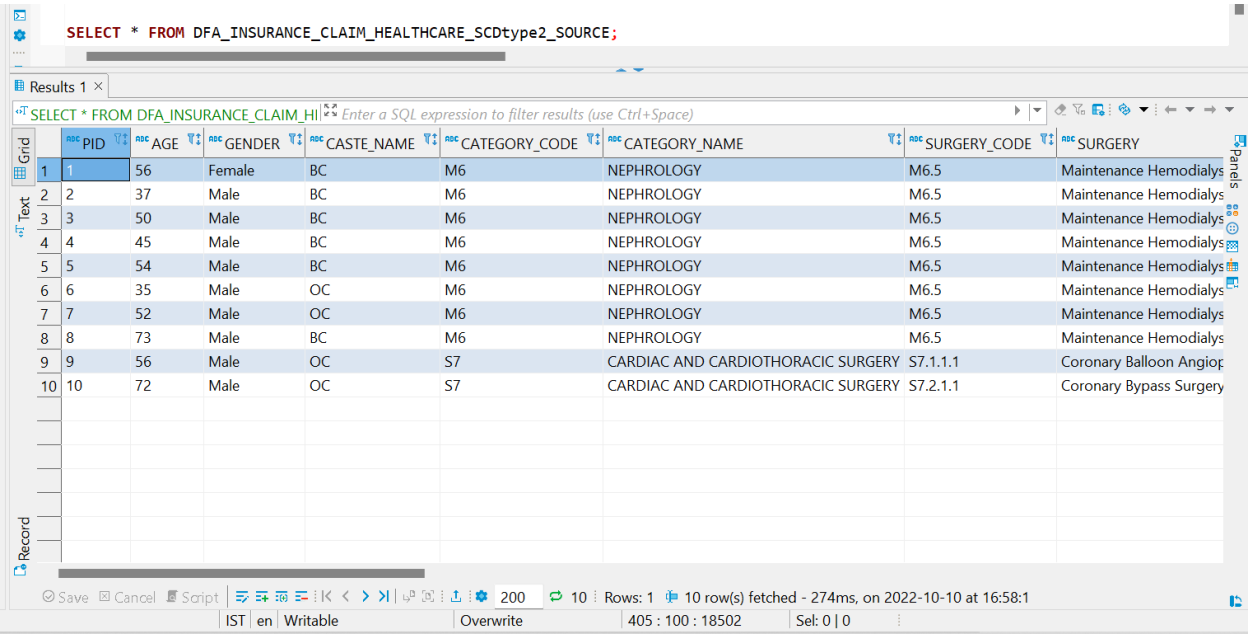
Scd2

Step1:Select source and make the connection to Database and select the table in object.

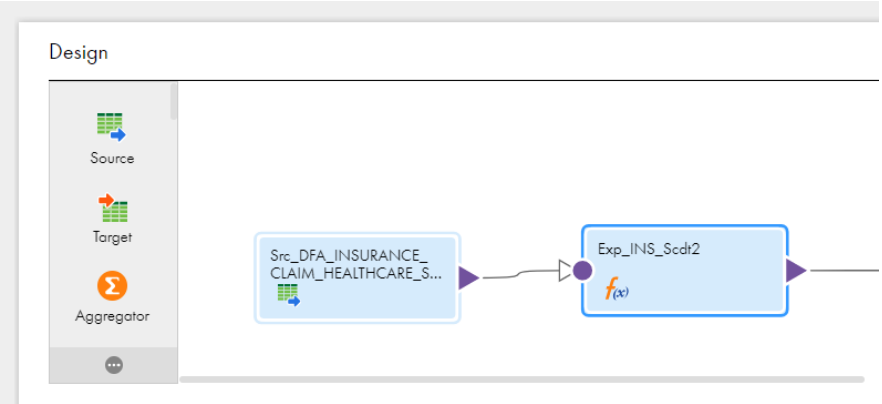


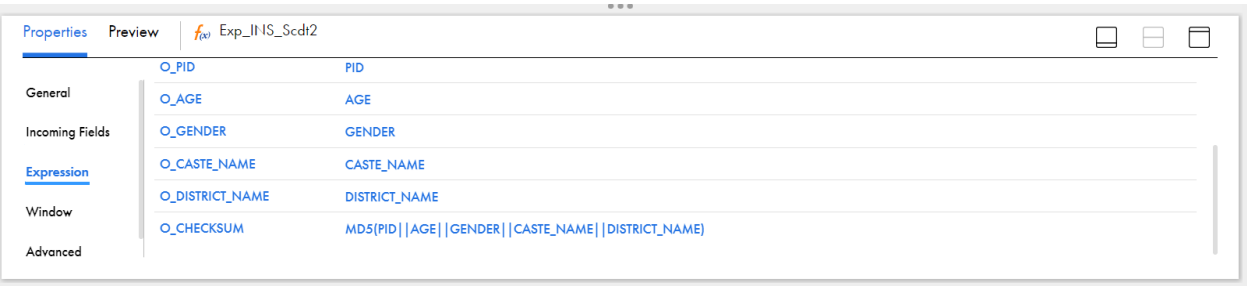


Source Table:

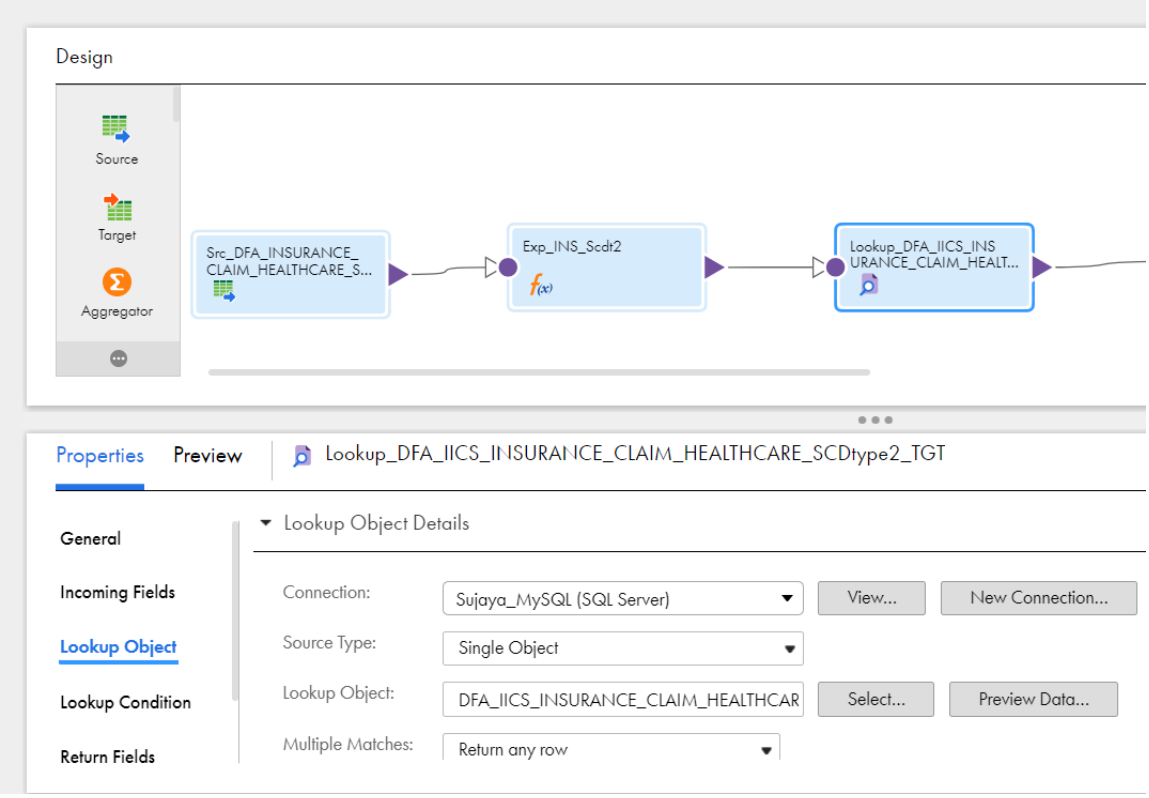


Step2:Drag and Drop the Expression and connect the source to expression. And click on Expression. Create the required fields and Validate the expression. Create the field Check Sum using MD5 function

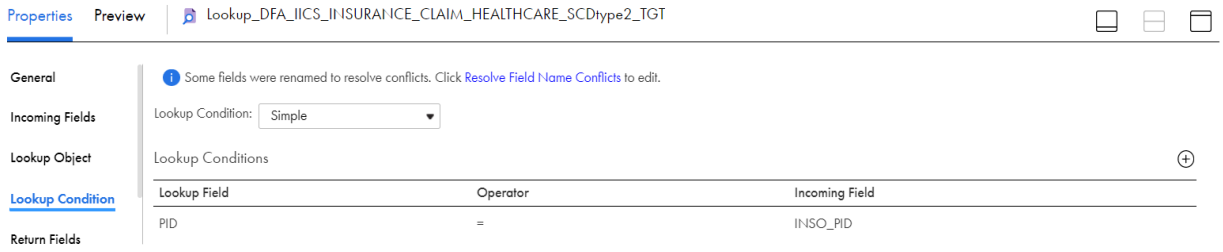




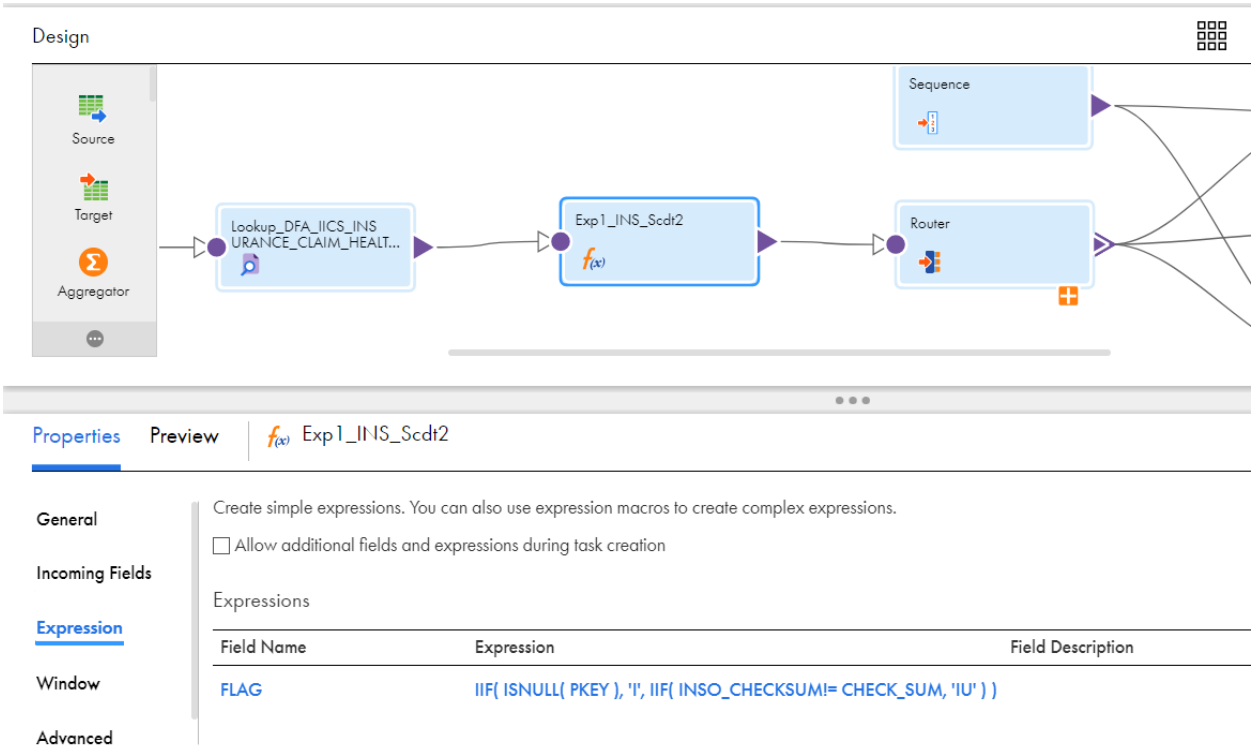
Step3:Drag and Drop Lookup and connect the Expression to Lookup. And click on Lookup object and make the connection to database and select the target table.



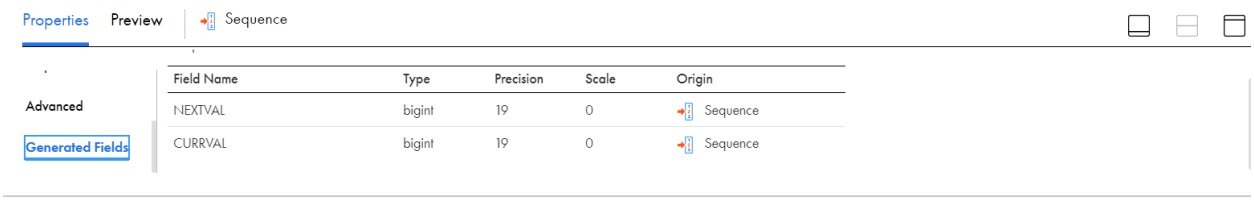
Step4: Click on Lookup condition and give the Lookup condition.



Step5:Drag and Drop Expression ,Router and Sequence and Create new Field FLAG and create the Expression and Validate the expression.

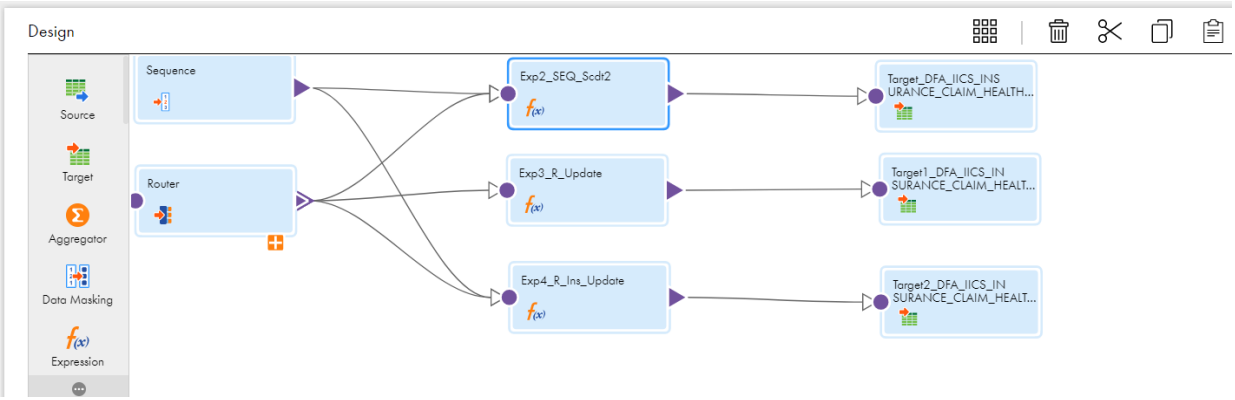


Step6:Click on Sequence and check the Generated Fields.



Step7: Click on Router and Generate the Output Group Insert ,Update and Insert.

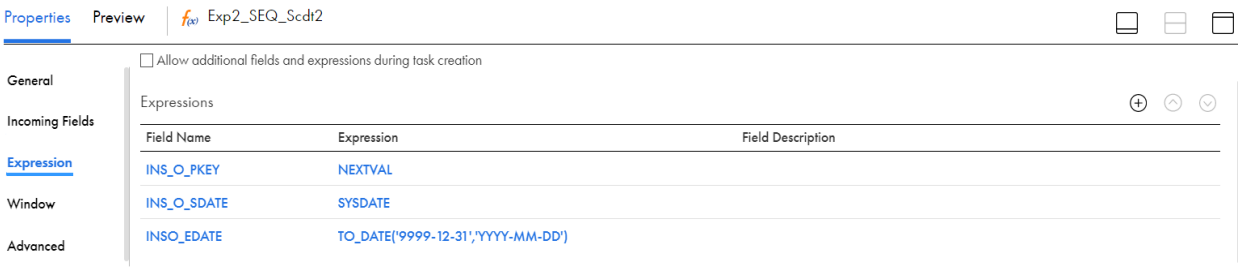
Step8:Drag and Drop three Expression and Connect Output of Sequence and Router to Expression2 and another output to the Expression4 i.e both Insert Expression and Connect the another output of Router to Expression3 i.e Update Expression.



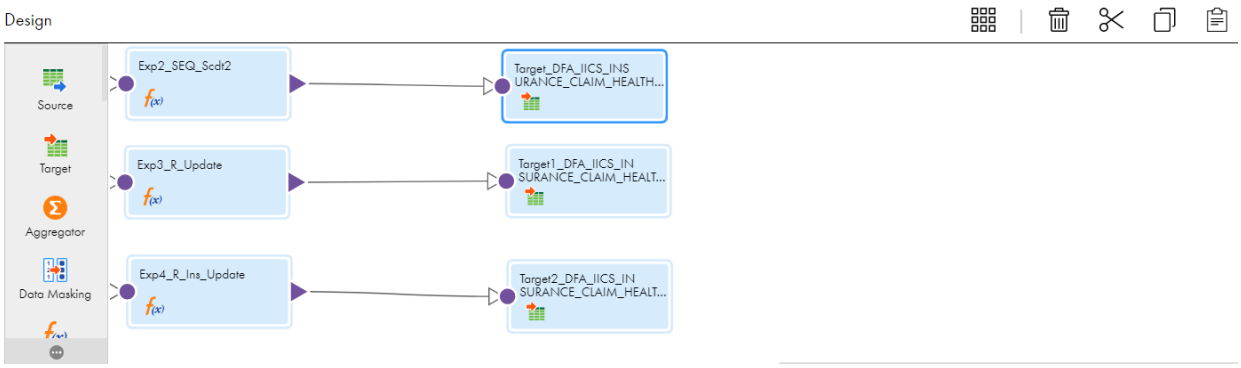
Step9: Click on Expression2 and generate Expression and Validate the Expression.

Step10: Click on Expression3 and generate Expression and Validate the Expression.

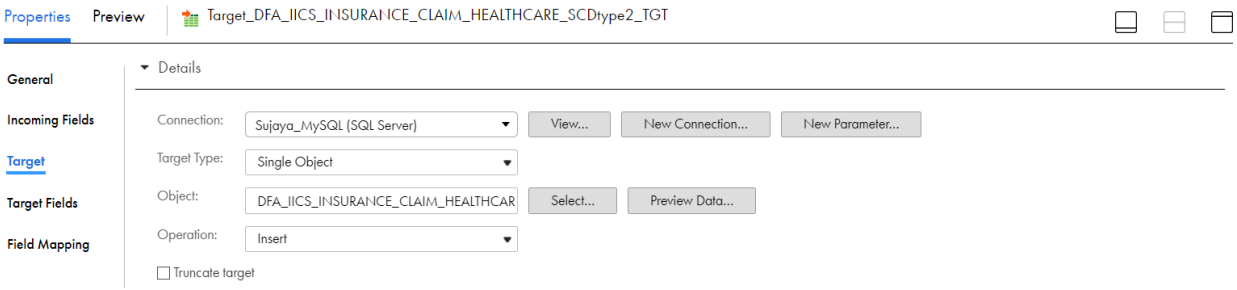
Step11: Click on Expression3 and generate Expression and Validate the Expression.

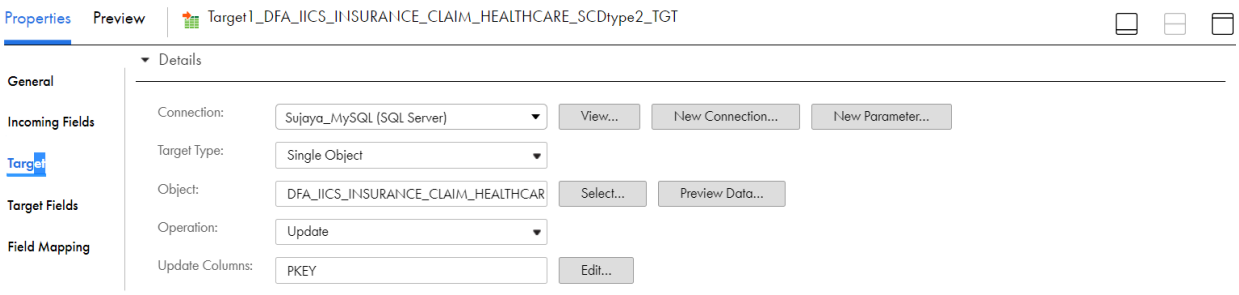


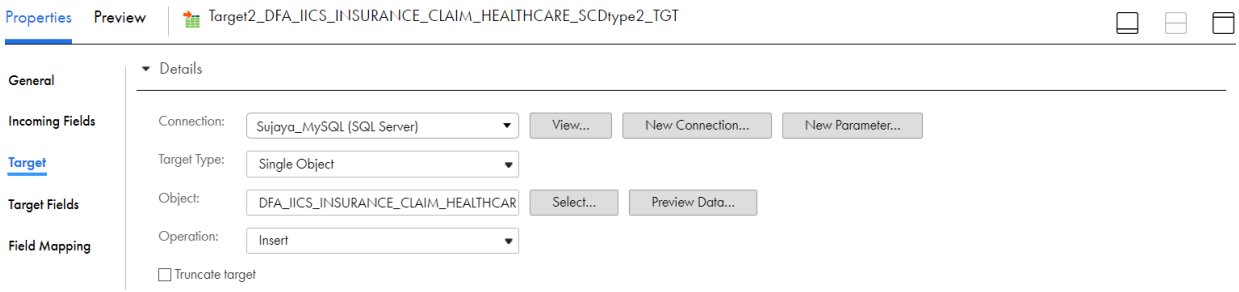
Step12: Connect the output of Expression2 to Target and output of Expression3 to Target1 and output of Expression3 to Target2.



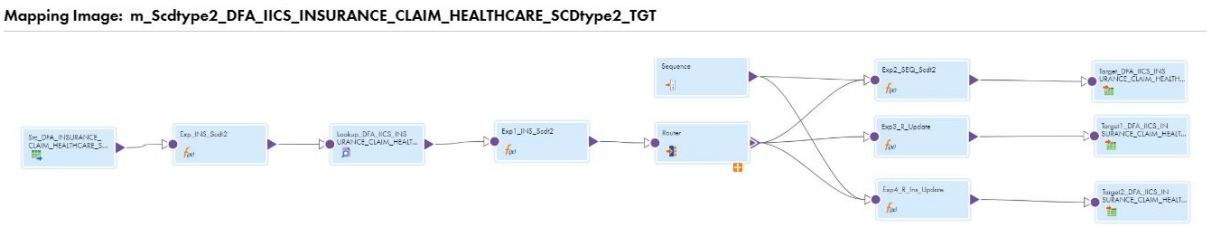
Step13:Click on Target and make the connection to Database and select the target table.



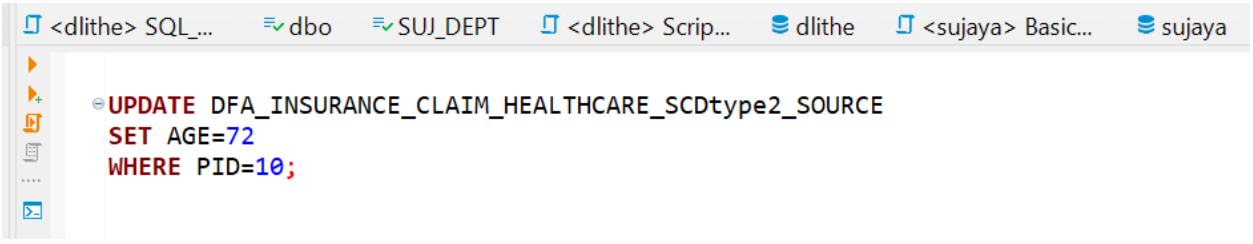




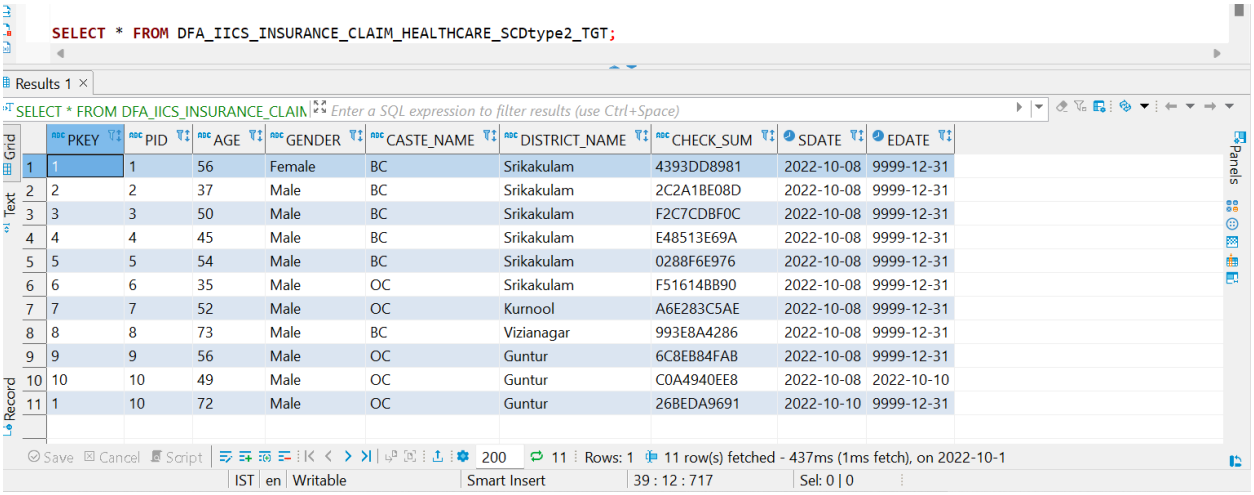
Step13:Save and Run the mapping.



Step14: Check in Database whether the data has loaded to destination table. Update the Source table and run the mapping again.



Step15: Check in database to view the updated record.



```
SELECT * FROM DFA_IICS_INSURANCE_CLAIM_HEALTHCARE_SCDtype2_TGT;
```

Results 1

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

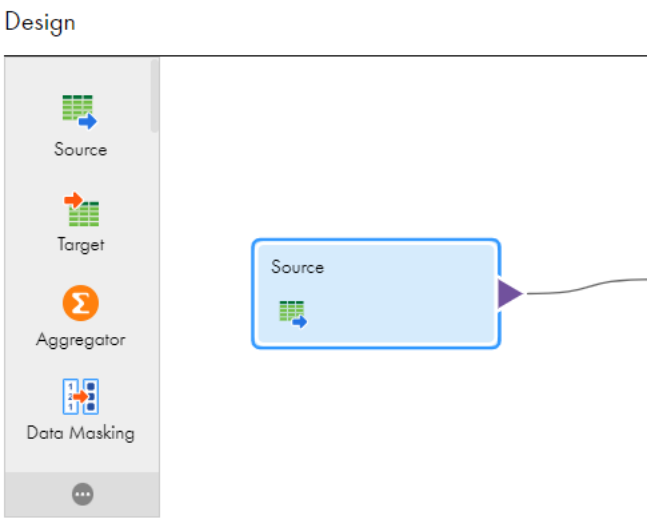
	PKEY	PID	AGE	GENDER	CASTE_NAME	DISTRICT_NAME	CHECK_SUM	SDATE	EDATE
1	1	1	56	Female	BC	Srikakulam	4393DD8981	2022-10-08	9999-12-31
2	2	2	37	Male	BC	Srikakulam	2C2A1BE08D	2022-10-08	9999-12-31
3	3	3	50	Male	BC	Srikakulam	F2C7CDBF0C	2022-10-08	9999-12-31
4	4	4	45	Male	BC	Srikakulam	E48513E69A	2022-10-08	9999-12-31
5	5	5	54	Male	BC	Srikakulam	0288F6E976	2022-10-08	9999-12-31
6	6	6	35	Male	OC	Srikakulam	F51614BB90	2022-10-08	9999-12-31
7	7	7	52	Male	OC	Kurnool	A6E283C5AE	2022-10-08	9999-12-31
8	8	8	73	Male	BC	Vizianagar	993E8A4286	2022-10-08	9999-12-31
9	9	9	56	Male	OC	Guntur	6C8EB84FAB	2022-10-08	9999-12-31
10	10	10	49	Male	OC	Guntur	C0A4940EE8	2022-10-08	2022-10-10
11	1	10	72	Male	OC	Guntur	26BEDA9691	2022-10-10	9999-12-31

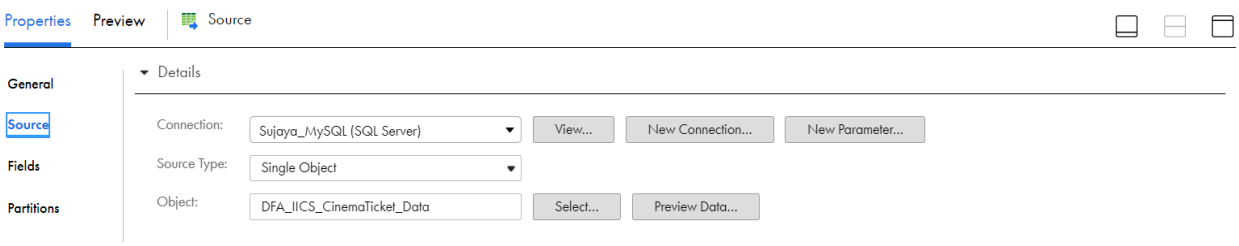
Save | Cancel | Script | 200 | 11 | Rows: 1 | 11 row(s) fetched - 437ms (1ms fetch), on 2022-10-1

IST | en | Writable | Smart Insert | 39 : 12 : 717 | Sel: 0 | 0

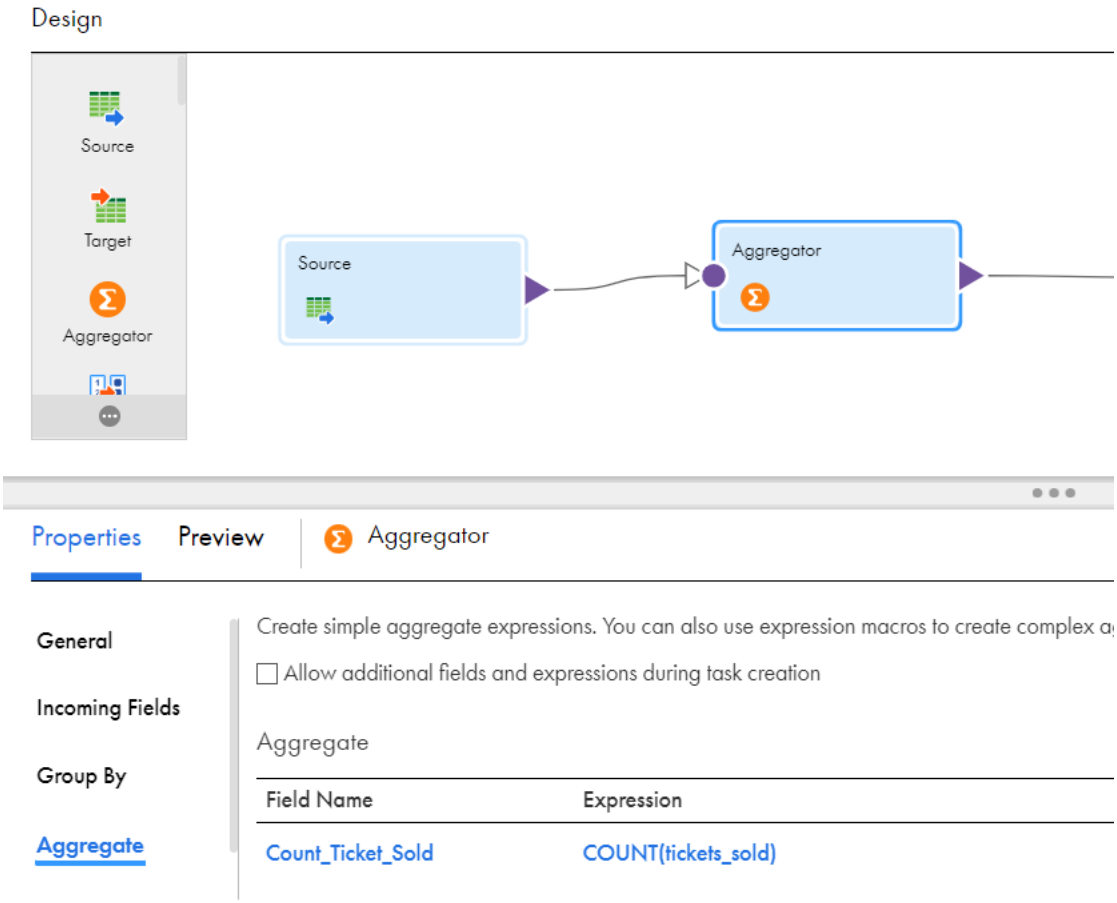
6. Create aggregate table based on the particular column(ex: Country code). Refer to the different data source from target system

Step1:Select source and Make the connection to database. And select the source table.

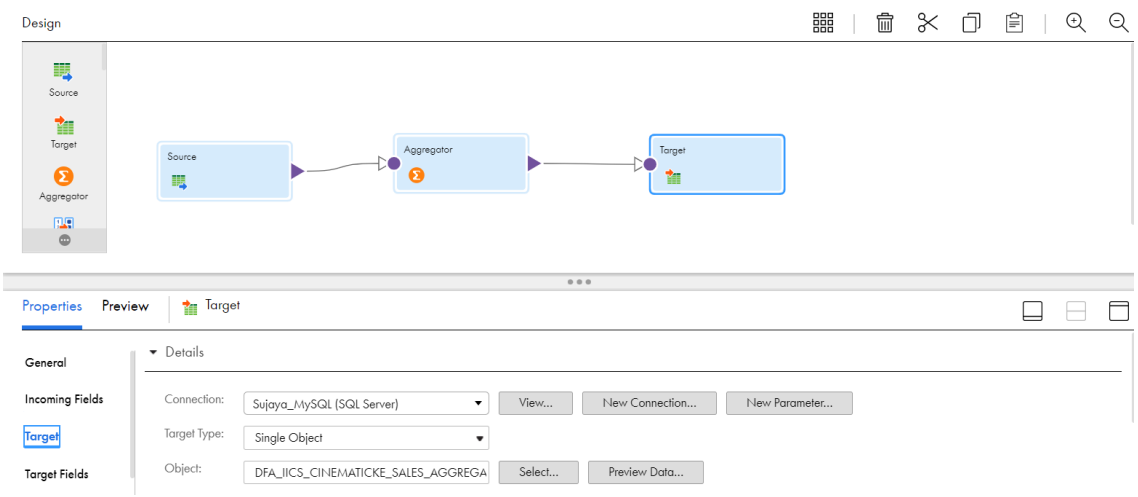




Step2: Drag and Drop the Aggregator Function and connect the source and Click on Aggregate and Write the Aggregate function to a required column.

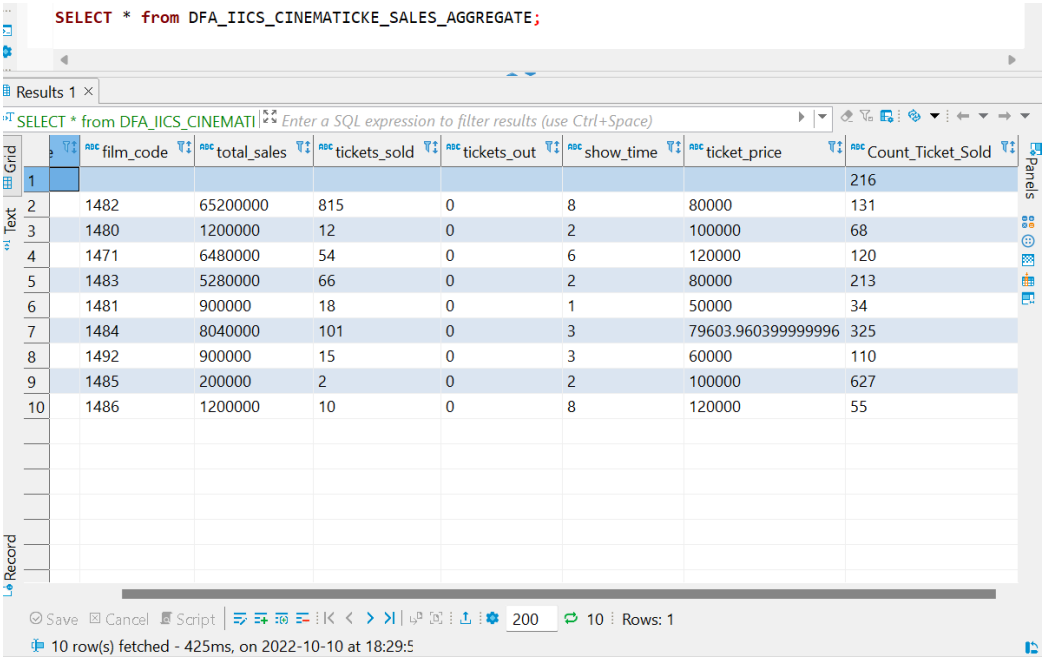


Step3:Connect the Aggregator Function to the Target table and Click on Target and make the connection to database and select the Target table.



Step4:Save and Run the Mapping.

Step5:Check in the Database whether the Data is aggregated.



	film_code	total_sales	tickets_sold	tickets_out	show_time	ticket_price	Count_Ticket_Sold
1							216
2	1482	65200000	815	0	8	80000	131
3	1480	1200000	12	0	2	100000	68
4	1471	6480000	54	0	6	120000	120
5	1483	5280000	66	0	2	80000	213
6	1481	900000	18	0	1	50000	34
7	1484	8040000	101	0	3	79603.960399999996	325
8	1492	900000	15	0	3	60000	110
9	1485	200000	2	0	2	100000	627
10	1486	1200000	10	0	8	120000	55