

UNIVERSITY ANALYTICS SYSTEM

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2320883

INDEX







- OBJECTIVE OF THE PROJECT
- SOURCE FILES
- REQUIREMENTS
- DESIGN TARGET AND DEVELOPMENTS
- MAPPINGS AND OUTPUTS
- CONCLUSION

OBJECTIVE

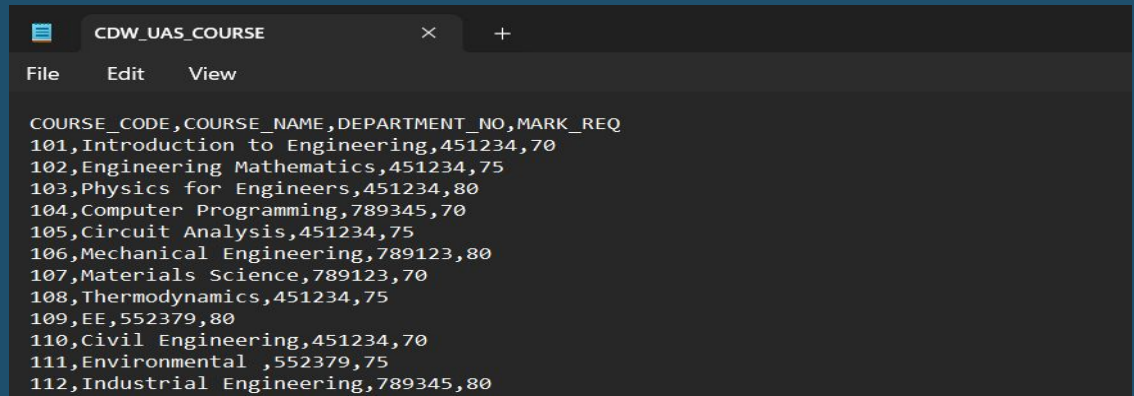
The purpose of our project is to develop an ETL process for effective University management using Informatica Power Center by integrating University data from multiple sources like Students data, Courses data, College data, etc into a centralized system.

SOURCE FILES

- ❑ CDW_UAS_COURSE
- ❑ CDW_UAS_D_COLLEGE
- ❑ CDW_UAS_DEPARTMENT
- ❑ CDW_UAS_FACULTY
- ❑ CDW_UAS_Student
- ❑ RESULT_DETAILS_STUDENTS

Name	Date modified	Type	Size
 CDW_UAS_COURSE	3/24/2024 10:37 AM	Text Document	2 KB
 CDW_UAS_D_COLLEGE	3/24/2024 10:37 AM	Text Document	1 KB
 CDW_UAS_DEPARTMENT	3/24/2024 10:37 AM	Text Document	1 KB
 CDW_UAS_FACULTY	3/24/2024 10:37 AM	Text Document	3 KB
 CDW_UAS_Student	3/24/2024 11:56 AM	Microsoft Excel Co...	21 KB
 RESULT_DETAILS_STUDENTS	3/24/2024 11:55 AM	Microsoft Excel Co...	10 KB

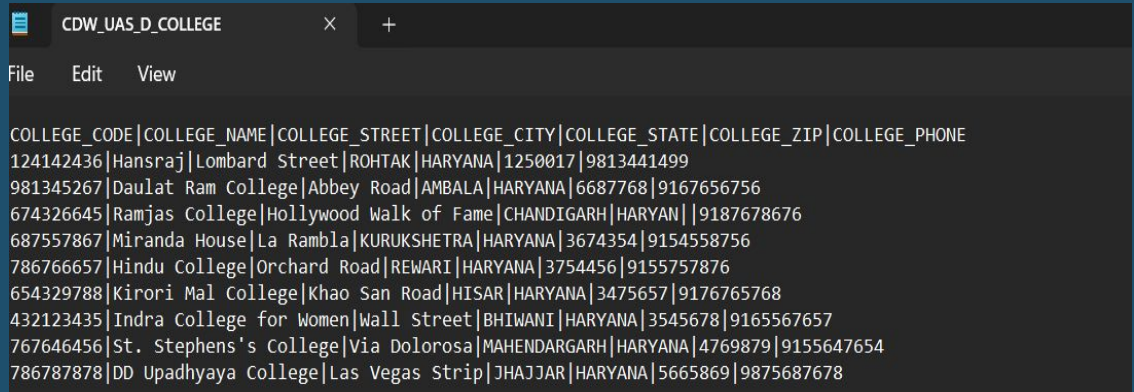
CDW_UAS_COURSE :-



A screenshot of a Notepad window titled "CDW_UAS_COURSE". The window has a menu bar with "File", "Edit", and "View". The text inside the window is a list of course details, each line containing a course code, name, department number, and a requirement mark.

COURSE_CODE	COURSE_NAME	DEPARTMENT_NO	MARK_REQ
101	Introduction to Engineering	451234	70
102	Engineering Mathematics	451234	75
103	Physics for Engineers	451234	80
104	Computer Programming	789345	70
105	Circuit Analysis	451234	75
106	Mechanical Engineering	789123	80
107	Materials Science	789123	70
108	Thermodynamics	451234	75
109	EE	552379	80
110	Civil Engineering	451234	70
111	Environmental	552379	75
112	Industrial Engineering	789345	80

CDW_UAS_D_COLLEGE :-



A screenshot of a Notepad window titled "CDW_UAS_D_COLLEGE". The window has a menu bar with "File", "Edit", and "View". The text inside the window is a list of college details, each line containing a college code, name, street, city, state, zip, and phone number.

COLLEGE_CODE	COLLEGE_NAME	COLLEGE_STREET	COLLEGE_CITY	COLLEGE_STATE	COLLEGE_ZIP	COLLEGE_PHONE
124142436	Hansraj	Lombard Street	ROHTAK	HARYANA	1250017	9813441499
981345267	Daulat Ram College	Abbey Road	AMBALA	HARYANA	6687768	9167656756
674326645	Ramjas College	Hollywood Walk of Fame	CHANDIGARH	HARYAN		9187678676
687557867	Miranda House	La Rambla	KURUKSHETRA	HARYANA	3674354	9154558756
786766657	Hindu College	Orchard Road	REWARI	HARYANA	3754456	9155757876
654329788	Kirori Mal College	Khao San Road	HISAR	HARYANA	3475657	9176765768
432123435	Indra College for Women	Wall Street	BHIWANI	HARYANA	3545678	9165567657
767646456	St. Stephens's College	Via Dolorosa	MAHENDARGARH	HARYANA	4769879	9155647654
786787878	DD Upadhyaya College	Las Vegas Strip	JHAJJAR	HARYANA	5665869	9875687678

CDW_UAS_DEPARTMENT :-

CDW_UAS_DEPARTMENT

×

+

File

Edit

View

DEPARTMENT_NAME|DEPARTMENT_NO|DEPARTMENT_PHONE|DEPARTMENT_HEAD

Electronics Communication Engineering|451234|1234567890|John Smith

Computer Science and Engineering|789345|9876543210|Emily Johnson

Mechanical Engineering|789123|4567891230|Michael Davis


Information Technology|658921|6543219870|Sarah Wilson

Electrical Engineering|123900|7891234560|Jennifer Lee

Civil Engineering|675231|3210987654|Amanda Clark

Electrical and Instrumentation|552379|9876543210|Rachel dada

CDW_UAS_FACULTY :-



CDW_UAS_FACULTY

×

+

File

Edit

View

FACULTY_CODE,FACULTY_NAME,FACULTY_DESIGNATION,FACULTY_QUALIFICATION

102030405,Adarsh Thompson,Associate Professor,Ph.D. in Computer

289734648,Liam Johnson,Assistant Professor,Masters in Biology

387327887,Olivia Williams,Senior Lecturer,Ph.D. in Mathematics

438767684,Noah Brown,Professor,Masters in Chemistry

532897447,Ava Garcia,Associate Professor,Ph.D. in Physics

387643969,William Martinez,Assistant Professor,Masters in English

169426494,Sophia Anderson,Senior Lecturer,Ph.D. in Economics

819842412,James Thomas,Professor,Masters in Political Science

912884194,Isabella Jackson,Associate Professor,Ph.D. in Psychology

101429748,Lucas Lee,Assistant Professor,Masters in Sociology

111279414,Mia Hernandez,Senior Lecturer,Ph.D. in Philosophy

121290499,Amelia Smith,Professor,Masters in History

131744164,John Smith,Department head,Ph.D. in Engineering

146240144,Charlotte Rodriguez,Assistant Professor,Masters in EVS

158572447,Logan Lopez,Senior Lecturer,Ph.D. in Linguistics

167452847,Aiden White,Professor,Masters in BA

172457576,Ella Hennie,Associate Professor,Ph.D. in Art History

CDW_UAS_Student :-

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	FIRST_NAME	MIDDLE_NAME	LAST_NAME	ROLL	STREET_NAME	APT_NO	STUD_CITY	STUD_STATE	STUD_COUNTRY	STUD_ZIP	STUD_PHONE	STUD_EMAIL			
2	Alice	Spencer	Dan	1001	Maple Street	101	Beverly Hills	California	INDIA	98101	1.23E+09	alice.john@gmail.com			
3	Bob	Joe	Miller	1002	Elm St	102	San Diego	California	USA	89101	5.56E+09	bob.daniel@gmail.com			
4	Charlie	Dsouza	Williams	1003	Maple St	103	San Francisco	California	USA	10001	5.56E+09	charlie.williams@gmail.com			
5	Olivia	Head	Brown	1004	Oak St	104	San Francisco	California	USA	78753	5.55E+09	olivia.brown@gmail.com			
6	Emily	Black	Garcia	1005	Pine St	105	Los Angeles	California	USA	33133	5.55E+09	emily.garcia@gmail.com			
7	Liam	Pale	Miller	1006	Cedar St	106	Los Angeles	California	USA	85001	5.55E+09	liam.miller@gmail.com			
8	Ava	Paine	Davis	1007	Birch St	107	New York	New York	USA	80201	5.56E+09	ava.davis@gmail.com			
9	Sophia	Hood	Robinson	1008	Willow St	108	New York	New York	USA	60601	5.56E+09	sophia.robinson@gmail.com			
10	Isabella	Jose	Clark	1009	Poplar St	109	Buffalo	California	USA	53201	5.56E+09	isabella.clark@gmail.com			
11	Charlotte	Will	Lewis	1010	Sycamore	110	Buffalo	California	USA	97201	5.56E+09	charlotte.lewis@gmail.com			

RESULT_DETAILS_STUDENTS:-

	A	B	C	D	E	F	G	H	I	J	K	L
1	ROLL	DEPARTMENT	COLLEGE	COURSE_CODE	FACULTY	RESULT_MARKS						
2	1001	451234	Hansraj	101	1.02E+08	60						
3	1002	789345	Daulat Rao	102	2.9E+08	70						
4	1003	789123	Daulat Rao	103	3.87E+08	80						
5	1004	658921	Ramjas College	104	4.39E+08	90						
6	1005	123900	Miranda House	105	5.33E+08	50						
7	1006	675231	Hindu College	106	3.88E+08	40						
8	1007	552379	Kirori Mal	107	1.69E+08	70						
9	1008	451234	Indra College	108	8.2E+08	80						
10	1009	789345	St. Stephen's	101	9.13E+08	90						
11	1010	789123	DD Upadhyay	102	1.01E+08	99						
12	1011	658921	Hansraj	103	1.11E+08	58						
13	1012	123900	Daulat Rao	104	1.21E+08	74						
14	1013	675231	Daulat Rao	105	1.46E+08	35						
15	1014	552379	Ramjas College	106	1.59E+08	89						

REQUIREMENTS

□ Requirement 1:-

Student Dimension – The Student dimension table **CDW_UAS_D_STUDENT_EFF_DATE** is a Type – II SCD table which contains all students' information. The source file's name is **CDW_UAS_student.csv**. The source sends the file on a daily basis. History of the students' needs to be maintained in the table.

□ Requirement 2:-

College Dimension - The College dimension table **CDW_UAS_D_COLLEGE** is a Type – I SCD which contains all college details. *Data is added to this table, only when a new college is being opened.* So, the load schedule would be *on demand*. The source file's name is **CDW_UAS_COLLEGE.txt** and it is pipe (|) delimited. The table is updated/ inserted for old/ new branches respectively and no history is maintained

□ Requirement 3:-

Department Dimension - The Department dimension table **CDW_UAS_D_DEPARTMENT** is a Type – I SCD table which contains all the departments' information. The source file's name is **CDW_UAS_DEPARTMENT.txt** and it is pipe (|) delimited. The table is updated/inserted for old/new suppliers respectively on a daily basis and no history is maintained.

□ Requirement 4:-

- **Course Dimension** - The course dimension table **CDW_UAS_D_COURSE** is a Type – I SCD which contains all course information. The source file's name is **CDW_UAS_COURSE.txt** and it is comma (,) delimited. This table is *dependent on the Department table* for the Department Id. The department table must contain the *respective department information before loading course table*. The table is updated/inserted for old/new products respectively on a daily basis and no history is maintained.

□ Requirement 5:-

Faculty Dimension - The faculty dimension table **CDW_UAS_D_FACULTY** is a Type – I SCD which contains all faculty details. The source file's name is **CDW_UAS_FACULTY.txt** and it is comma (,) delimited. The table is updated/ inserted for old/ new branches respectively and no history is maintained

□ Requirement 6:-

Results Staging - The results staging table **CDW_STG_RESULT** receives the results data from the different evaluation centers **RESULT_DETAILS_STUDENTS.csv**. The information from different files is standardized in the staging table. The data is loaded with all related dimension information from the respective dimension tables in the warehouse.

□ Requirement 7:-

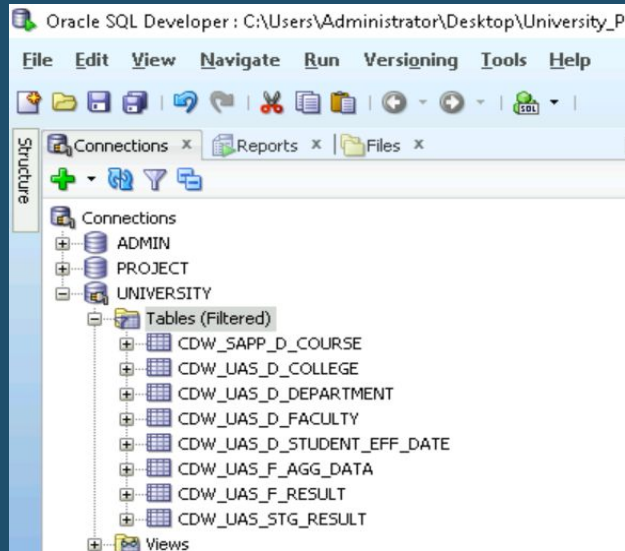
Results Fact - The results fact table **CDW_UAS_F_RESULTS** contains all the transactions loaded from the staging table **CDW_STG_RESULTS**. This table is loaded *only after the staging table has been loaded completely from the transaction files arriving from all the different centers.*

□ Requirement 8:-

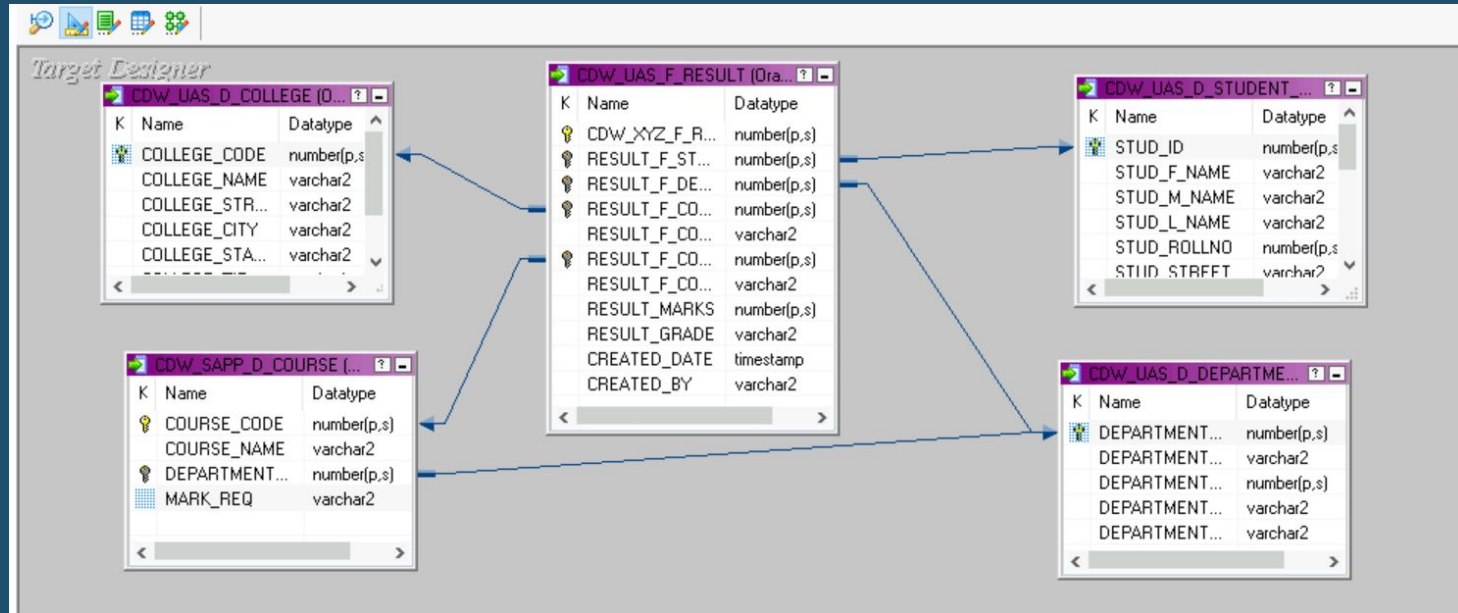
Results Aggregate - The Sales Aggregate table **CDW_UAS_F_AGG_DATA** pulls data from the Results fact table **CDW_UAS_F_RESULTS**. The table is aggregated by college_code & course_code .

DESIGN TARGET AND DEVELOPMENTS

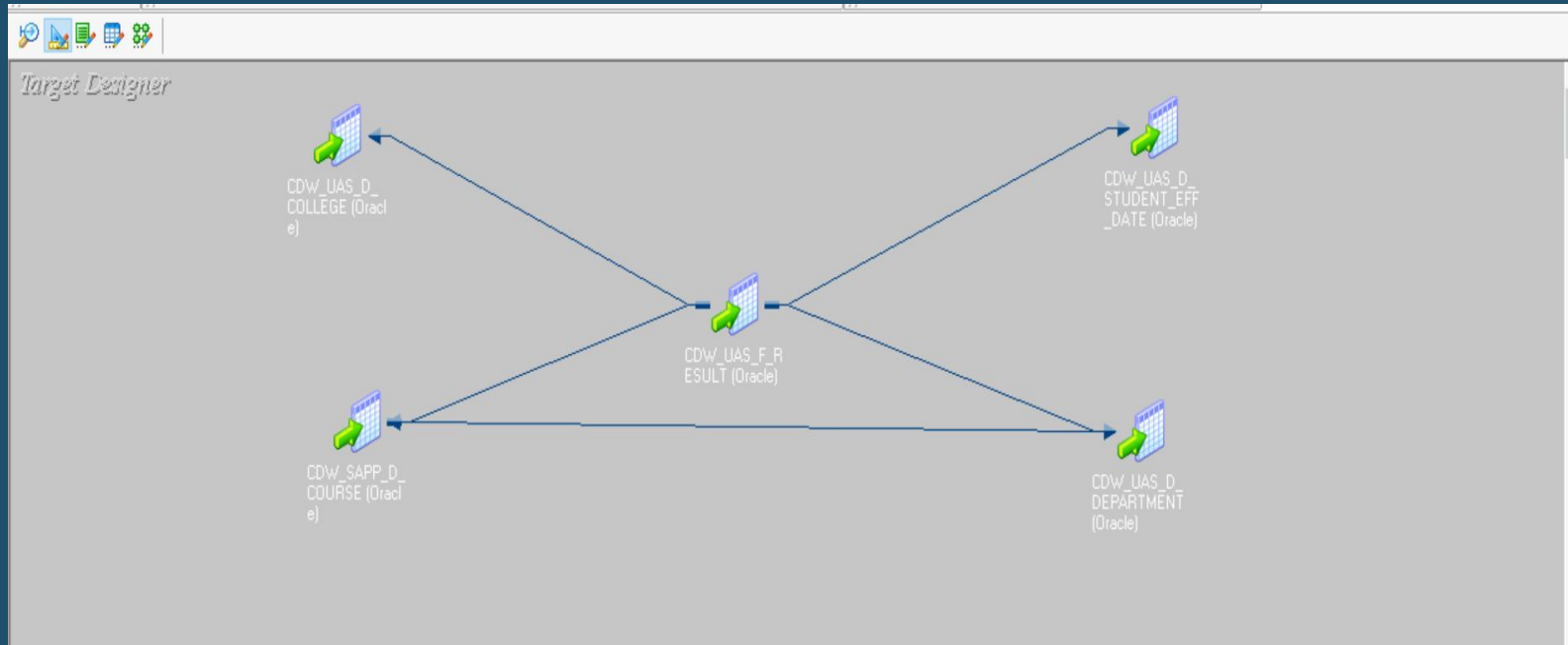
As per the requirements I have created target tables in sql developer as shown below:-



DATA MODELING



ICONIZE DATA MODEL :-

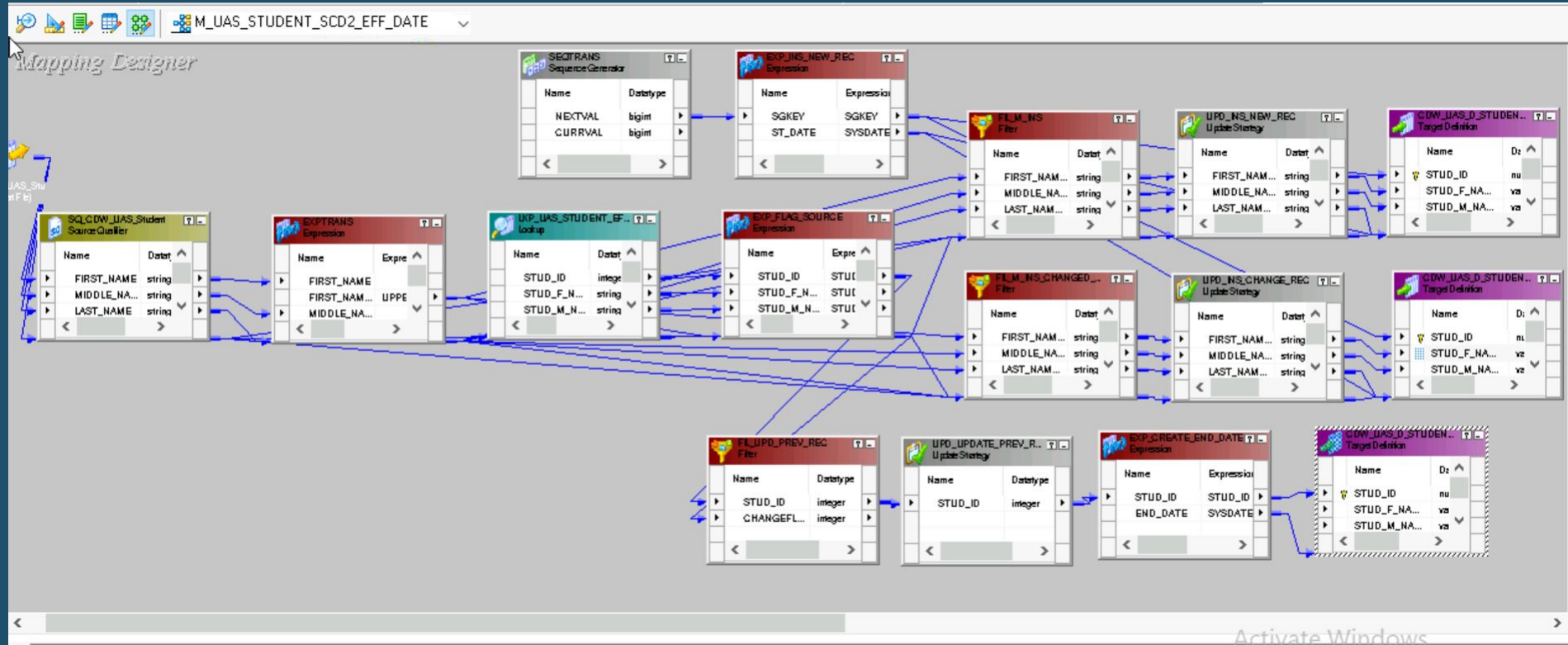


Mapping 1:-

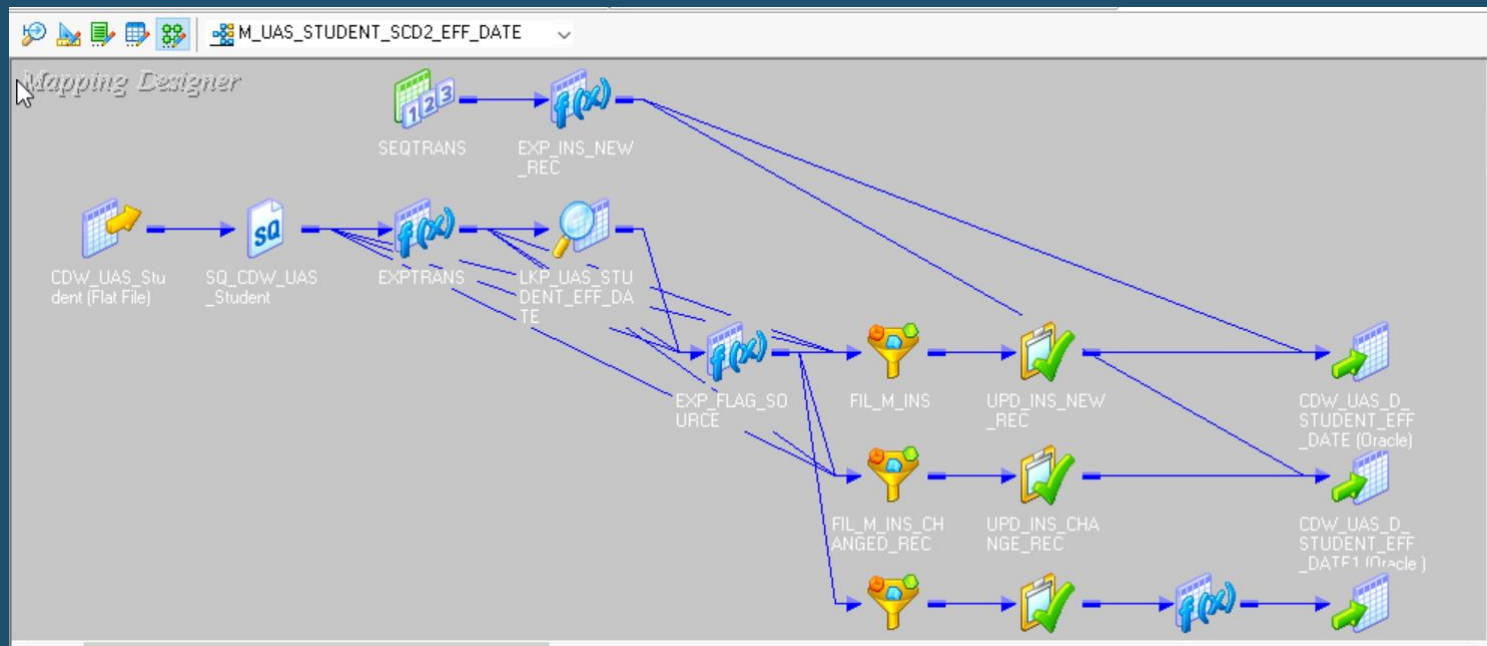
CDW_UAS_student.csv



CDW_UAS_D_STUDENT_EFF_DATE




Iconize Mapping 1:-



OUTPUT M1 :-

Script Output x Query Result x

 SQL | Fetched 50 rows in 0.023 seconds

	...	STUD...	STUD_...	STU...	...	STUD_STR...	STUD_CITY	ST...	S...	S...	STUD_PHONE	STUD_EMAIL	CREATED_DATE	END_DATE
1	2199	Benjamin	alexander	Scott	1123 567	Elm A...	Denver	CO	USA	80201 789-123-4567	benjamin.scott@example.com	27-03-24 09:30:47.000000000	PM (null)	
2	2200	Amelia	luna	Green	1124 789	Pine ...	Washington	DC	USA	20001 891-234-5678	amelia.green@example.com	27-03-24 09:30:47.000000000	PM (null)	
3	2201	Elijah	james	Adams	1125 123	Oak A...	Memphis	TN	USA	38101 123-456-7890	elijah.adams@example.com	27-03-24 09:30:47.000000000	PM (null)	
4	2202	Gabriel	oliver	Baker	1126 789	Cedar...	Boston	MA	USA	2101 234-567-8910	gabriel.baker@example.com	27-03-24 09:30:47.000000000	PM (null)	
5	2203	Aria	chloe	Nelson	1127 123	Maple...	Baltimore	MD	USA	21201 345-678-9123	aria.nelson@example.com	27-03-24 09:30:47.000000000	PM (null)	
6	2204	Julian	ethan	Hill	1128 456	Cedar...	Nashville	TN	USA	37201 456-789-1234	julian.hill@example.com	27-03-24 09:30:47.000000000	PM (null)	
7	2205	Scarlett	avery	Ramirez	1129 789	Elm A...	Louisville	KY	USA	40201 567-891-2345	scarlett.ramirez@example.com	27-03-24 09:30:47.000000000	PM (null)	
8	2206	Levi	jack	Mitc...	1130 901	Pine ...	Milwaukee	WI	USA	53201 678-912-3456	levi.mitchell@example.com	27-03-24 09:30:47.000000000	PM (null)	
9	2207	Mila	charlotte	Perez	1131 234	Oak A...	Portland	OR	USA	97201 789-123-4567	mila.perez@example.com	27-03-24 09:30:47.000000000	PM (null)	
10	2208	Hazel	aria	Roberts	1132 567	Cedar...	Oklahoma ...	OK	USA	73101 891-234-5678	hazel.roberts@example.com	27-03-24 09:30:47.000000000	PM (null)	
11	2209	Liam	oliver	Turner	1133 789	Maple...	Las Vegas	NV	USA	89101 123-456-7890	liam.turner@example.com	27-03-24 09:30:47.000000000	PM (null)	
12	2210	Mateo	logan	Phil...	1134 901	Elm A...	Albuquerque	NM	USA	87101 234-567-8910	mateo.phillips@example.com	27-03-24 09:30:47.000000000	PM (null)	
13	2211	Zoe	layla	Camp...	1135 123	Pine ...	Tucson	AZ	USA	85701 345-678-9123	zoe.campbell@example.com	27-03-24 09:30:47.000000000	PM (null)	
14	2212	Daniel	jose	Parker	1136 456	Oak A...	Fresno	CA	USA	93701 456-789-1234	daniel.parker@example.com	27-03-24 09:30:47.000000000	PM (null)	
15	2213	Riley	audrey	Evans	1137 789	Maple...	Sacramento	CA	USA	95801 567-891-2345	riley.evans@example.com	27-03-24 09:30:47.000000000	PM (null)	
16	2214	Jackson	ayden	Collins	1138 901	Elm A...	Long Beach	CA	USA	90801 678-912-3456	jackson.collins@example.com	27-03-24 09:30:47.000000000	PM (null)	
17	2215	Isaac	john	Stewart	1139 123	Pine ...	Kansas City	MO	USA	64101 789-123-4567	isaac.stewart@example.com	27-03-24 09:30:47.000000000	PM (null)	
18	2216	Eleanor	grace	Sanchez	1140 456	Oak A...	Mesa	AZ	USA	85201 891-097-2346	eleanor.sanchez@example.com	27-03-24 09:30:47.000000000	PM (null)	
19	2217	John	ayden	Smith	1141 123	Main ...	Cityville	CA	USA	12345 155-512-3488	john.smith@email.com	27-03-24 09:30:47.000000000	PM (null)	

d: C:\Users\Administrator\Desktop\University_Project\University_Project\Target_queries.sql

Line 13 Column 25 | Insert | Modified | Windows: CR/LF Editing

OUTPUT M1 SCD2 EFFECT:-

	S...	STUD_F_NAME	STUD_...	STUD_L...	STUD_STREET	STUD_CITY	...	STUD_ZIP	STUD_PHONE	STUD_EMAIL	CREATED_DATE	END_DATE
1	2199	Benjamin	alexander	Scott	1123 567 Elm Ave,223 Denver	CO	USA	80201	789-123-4567	benjamin.scott@ex...	27-03-24 09:30:47.000000000 PM	(null)

Status Succeeded										
Source/Target Statistics										
Transformation Name	Node	Applied Rows	Affected Rows	Rejected Rows	Throughput (Rows/Sec)	Throughput (Bytes/Sec)	Bytes	Last Error Code	Last Error Message	Start Time
CDW_UAS_D_S...	node01	0	0	0	0	0		0	No errors encountered.	27-03-2024 2
CDW_UAS_D_S...	node01	0	0	0	0	0		0	No errors encountered.	27-03-2024 2
CDW_UAS_D_S...	node01	0	0	0	0	0		0	No errors encountered.	27-03-2024 2
SQ SQ_CDW_UAS_...	node01	201	201	0	201	64722	64722	0	No errors encountered.	27-03-2024 2

	STUD_ID	STUD_F...	STUD_M...	ST...	STUD_STREET	STUD...	S...	STUD_ZIP	STUD_PHONE	STUD_EMAIL	CREATED_DATE	END_DATE
1	2199	Benjamin	alexander	Scott	... 567 Elm Ave,223 Denver	CO	USA	80201	789-123-4567	benjamin@rexample.com	27-03-24 09:30:47.000000000 PM	27-03-24
2	2278	Benjamin	alexander	Scott	... 567 Elm Ave,223 Denver	CO	USA	80201	789-123-4567	benjamin.scott@example.com	27-03-24 10:03:27.000000000 PM	(null)

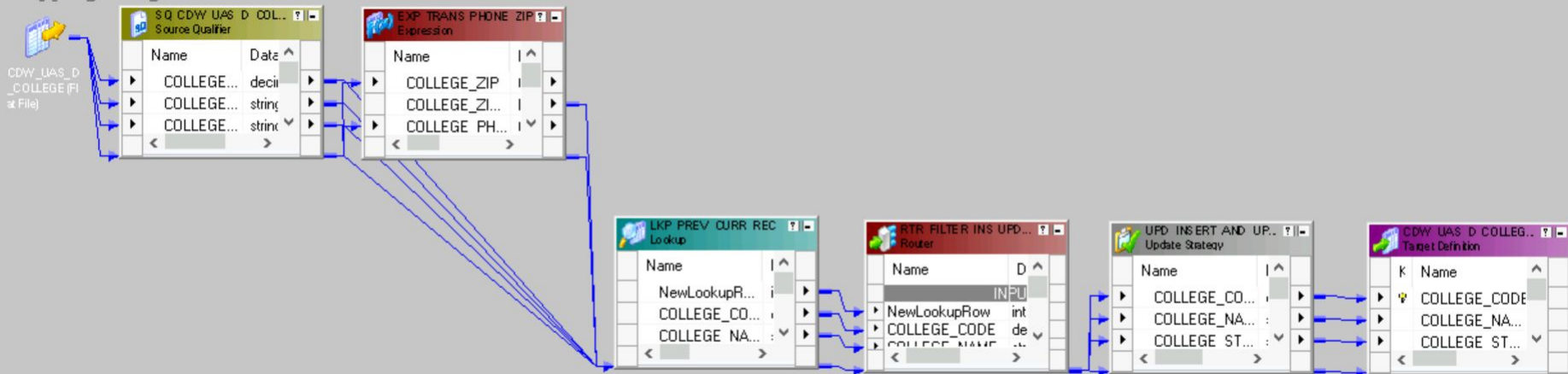
Source/Target Statistics										
Transformation Name	Node	Applied Rows	Affected Rows	Rejected Rows	Throughput (Rows/Sec)	Throughput (Bytes/Sec)	Bytes	Last Error Code	Last Error Message	Start Time
CDW_UAS_D_S...	node01	0	0	0	0	0		0	No errors encountered.	27-03-2024 2
CDW_UAS_D_S...	node01	1	1	0	1	349	349	0	No errors encountered.	27-03-2024 2
CDW_UAS_D_S...	node01	1	1	0	1	24	24	0	No errors encountered.	27-03-2024 2
SQ SQ_CDW_UAS_...	node01	201	201	0	201	64722	64722	0	No errors encountered.	27-03-2024 2

Mapping 2 :-

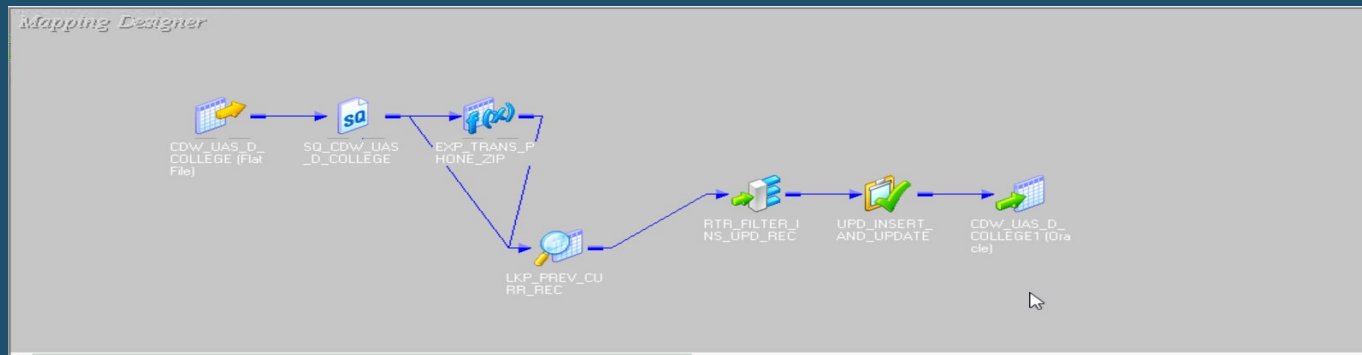
CDW_UAS_COLLEGE.txt

CDW_UAS_D_COLLEGE

Mapping Designer



Iconize Mapping 2 :-



OUTPUT M2 :-

SQL | All Rows Fetched: 9 in 0.003 seconds

	COLLEGE_CODE	COLLEGE_NAME	COLLEGE_STREET	COLLEGE_CITY	COLLEGE_STATE	COLLEGE_ZIP	COLLEGE_PHONE
1	124142436	Hansraj College	Lombard Street	ROHTAK	HARYANA	1250017	(987) 567-7689
2	981345267	Daulat Ram College	Abbey Road	AMBALA	HARYANA	6687768	(916) 765-6756
3	674326645	Ramjas College	Hollywood Walk of Fame	CHANDIGARH	HARYANA	7668789	(918) 767-8676
4	687557867	Miranda House	La Rambla	KURUKSHETRA	HARYANA	3674354	(915) 455-8756
5	786766657	Hind College	Orchard Road	REWARI	HARYANA	3754456	(915) 575-7876
6	654329788	Kirori Mal College	Khao San Road	HISAR	HARYANA	3475657	(917) 676-5768
7	432123435	Indraprastha College	Wall Street	BHIWANI	HARYANA	3545678	(916) 556-7657
8	767646456	St. Stephens's College	Via Dolorosa	MAHENDRAGARH	HARYANA	4769879	(915) 564-7654
9	786787878	DD. Upadhyaya College	Las Vegas Strip	JHAJJAR	HARYANA	5665869	(987) 568-7678

OUTPUT M2 SCD1 EFFECT:-

Source/Target Statistics										
Transformation Name	Node	Applied Rows	Affected Rows	Rejected Rows	Throughput (Rows/Sec)	Throughput (Bytes/Sec)	Bytes	Last Error Code	Last Error Message	Start Time
CDW_UAS_D_C...	node01	0	0	0	0	0		0	No errors encountered.	27-03-2024 2
SQ SQ_CDW_UAS_...	node01	9	9	0	9	1314	1314	0	No errors encountered.	27-03-2024 2

	COLLEGE_CODE	COLLEGE_NAME	COLLEGE_STREET	COLLEGE_CITY	COLLEGE_STATE	COLLEGE_ZIP	COLLEGE_PHONE
1	124142436	Hansraj College	Lombard Street	ROHTAK	HARYANA	1250017	(987) 567-7689

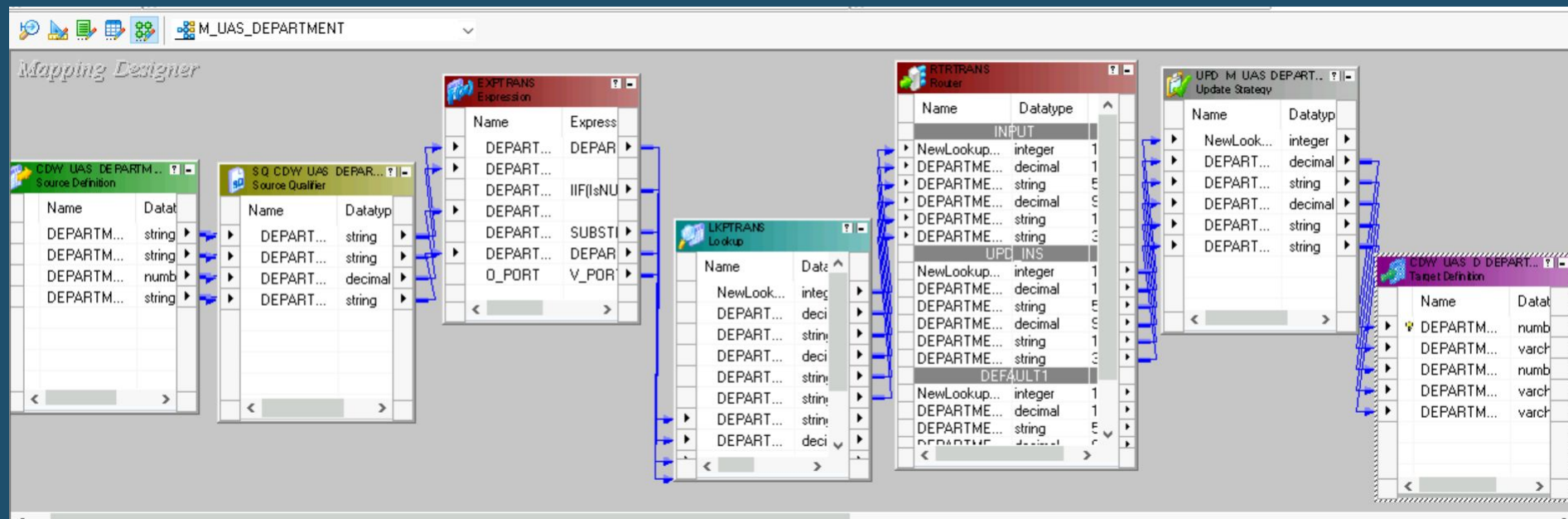
Source/Target Statistics										
Transformation Name	Node	Applied Rows	Affected Rows	Rejected Rows	Throughput (Rows/Sec)	Throughput (Bytes/Sec)	Bytes	Last Error Code	Last Error Message	Start Time
CDW_UAS_D_C...	node01	1	1	0	1	149	149	0	No errors encountered.	28-03-2024
SQ SQ_CDW_UAS_...	node01	9	9	0	9	1314	1314	0	No errors encountered.	28-03-2024

	COLLEGE_CODE	COLLEGE_NAME	COLLEGE_STREET	COLLEGE_CITY	COLLEGE_STATE	COLLEGE_ZIP	COLLEGE_PHONE
1	124142436	Hansraj College	Pahartali Road	ROHTAK	HARYANA	1250017	(987) 567-7689

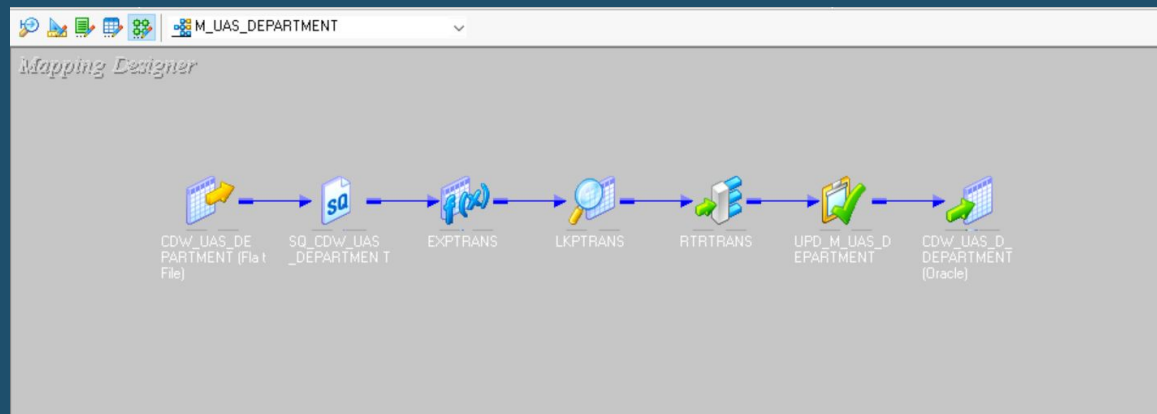
Mapping 3 :-

CDW_UAS_DEPARTMENT.txt

CDW_UAS_D_DEPARTMENT



Iconize Mapping 3:-



OUTPUT M3:-

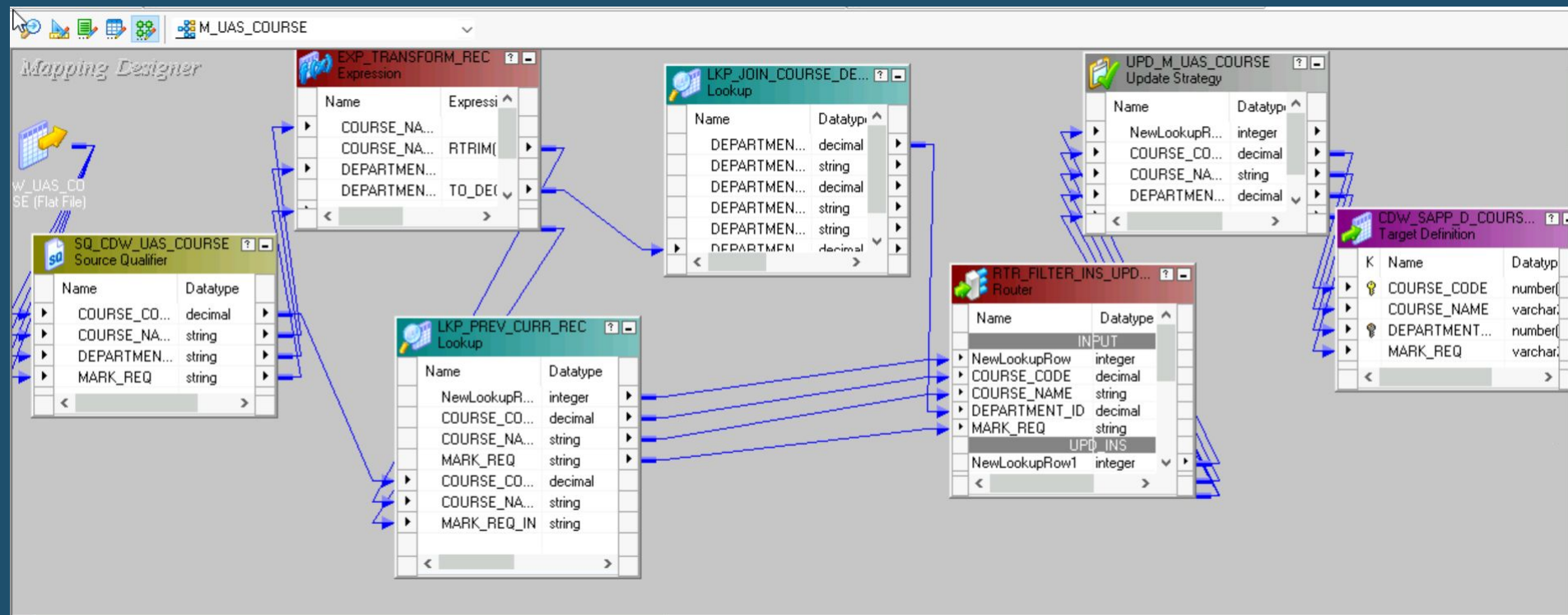
All Rows Fetched: 7 in 0.002 seconds

DEPARTMENT_ID	DEPARTMENT_NAME	DEPARTMENT_NO	DEPARTMENT_PHONE	DEPARTMENT_HEAD
1	CSE	451234	123-456-7890	John Smith
2	ECE	789345	987-654-3210	Emily Johnson
3	BI/BT	789123	456-789-1230	Michael Davis
4	EEE	658921	654-321-9870	Sarah Wilson
5	CIVIL ENG.	123900	789-123-4560	Jennifer Lee
6	MECH ENG.	675231	321-098-7654	Amanda Clark
7	PETROLEUM ENG.	552379	987-654-3210	Rachel Anderson

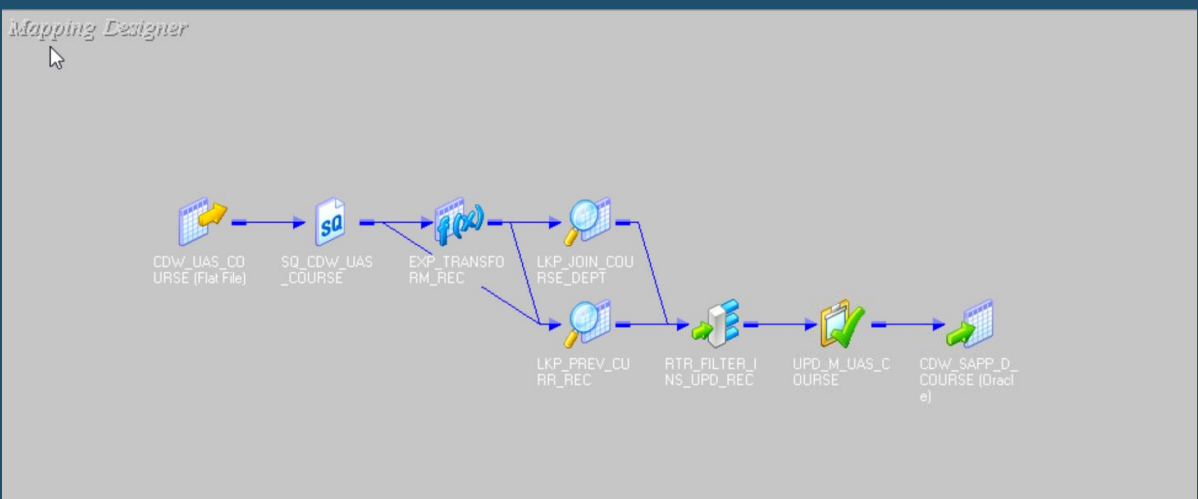
Mapping 4:-

CDW_UAS_COURSE.txt

CDW_UAS_D_COURSE



Iconize Mapping 4:-



OUTPUT M4 :-

SQL | All Rows Fetched: 40 in 0.005 seconds

	COURSE_CODE	COURSE_NAME	DEPARTMENT_ID	MARK_REQ
1	101	Introduction to Eng.	1	70
2	102	Engineering Maths.	1	70
3	103	Physics for Eng.	1	70
4	104	Computer Prog.	2	70
5	105	Circuit Analysis	1	70
6	106	Mechanical Eng.	3	70
7	107	Materials Science	3	70
8	108	Thermodynamics	1	70
9	109	Electrical Eng.	7	70
10	110	Civil Eng.	1	70
11	111	Environmental Eng.	7	70
12	112	Industrial Eng.	2	70
13	113	Eng. Design	7	70
14	114	Control Systems	2	70
15	115	Robotics	7	70
16	116	Biomedical Eng.	2	70
17	117	Aerospace Eng.	7	70
18	118	Chemical Eng.	2	70

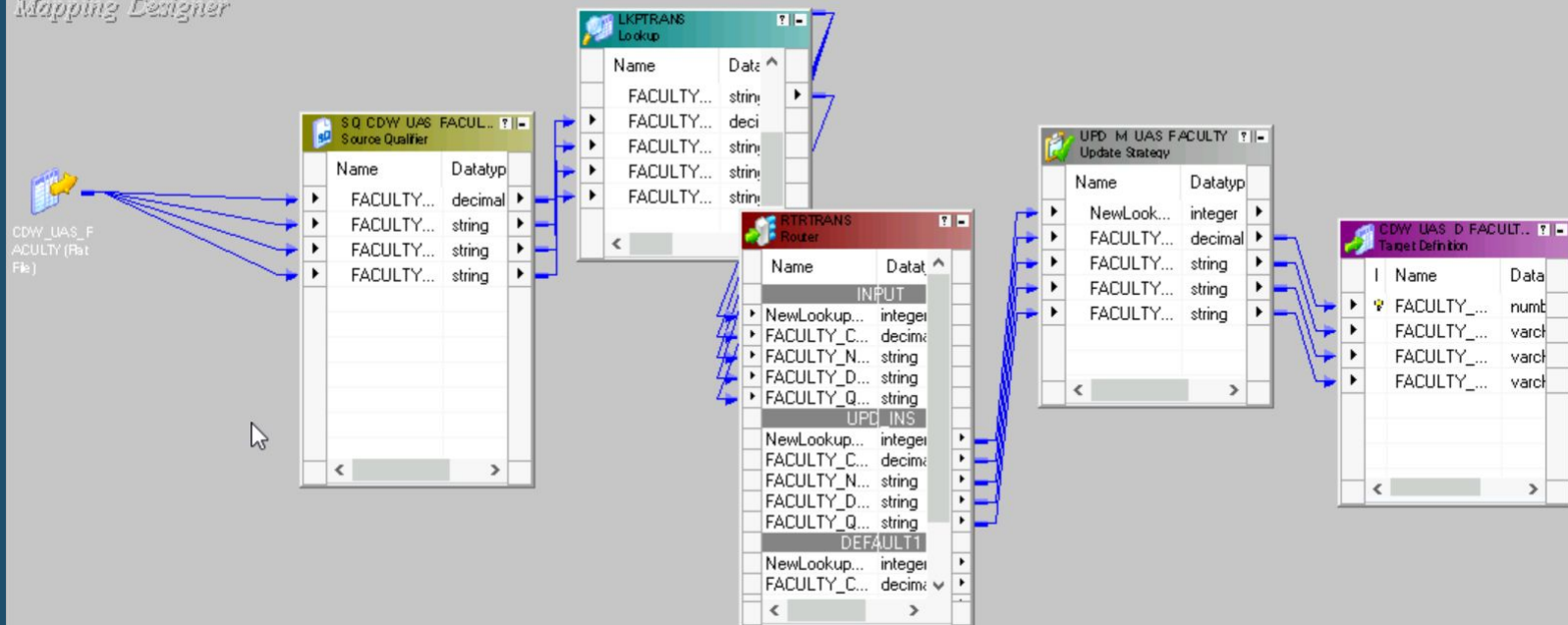
Mapping 5:-

CDW_UAS_FACULTY.txt

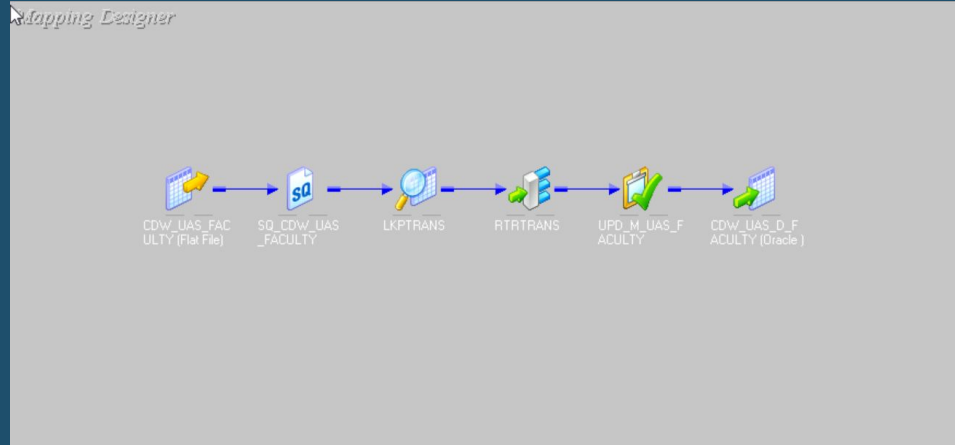


CDW_UAS_D_FACULTY

Mapping Designer



Iconize Mapping 5 :-



OUTPUT M5 :-

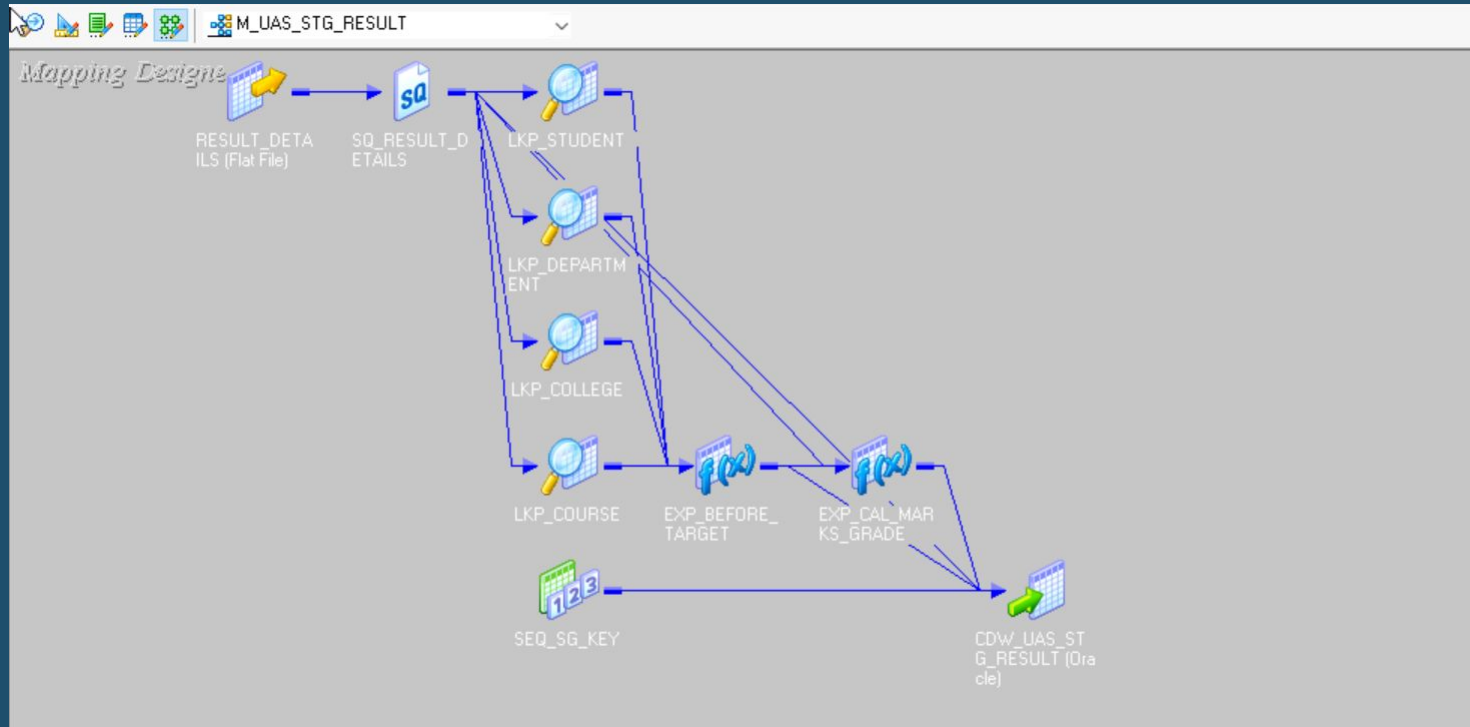
	FACULTY_CODE	FACULTY_NAME	FACULTY_DESIGNATION	FACULTY_QUALIFICATION
1	414877722	Emma Thomson	Associate Professor	Ph.D. in CSE
2	962825827	Liam Johnson	Assistant Professor	Masters in Biology
3	264193159	Olivia Williams	Senior Lecturer	Ph.D. in Mathematics
4	67579093	Noah Brown	Professor	Masters in Chemistry
5	172582113	Ava Garcia	Associate Professor	Ph.D. in Physics
6	823936141	William Martinez	Assistant Professor	Masters in ENG LIT.
7	266547592	Sophia Anderson	Senior Lecturer	Ph.D. in Economics
8	624385021	James Thomas	Professor	Masters in Political Sci
9	1906337	Isabella Jackson	Associate Professor	Ph.D. in Psy
10	778650625	Lucas Lee	Assistant Professor	Masters in Sociology
11	15366924	Mia Hernandez	Senior Lecturer	Ph.D. in Philosophy
12	103452682	Amelia Smith	Professor	Masters in History
13	279199482	John Smith	Department head	Ph.D. in Engineering
14	404771903	Charlotte Rodriguez	Assistant Professor	Masters IN EVS
15	267248075	Logan Lopez	Senior Lecturer	Ph.D. in Linguistics
16	690314796	Aiden White	Professor	Masters in Business Admin.
17	591036203	Ella Harris	Associate Professor	Ph.D. in Art History
18	997093193	Benjamin Clark	Assistant Professor	Masters in Public Health

Mapping 6 :-


RESULT_DETAILS_STUDENTS.csv



CDW_STG_RESULT



OUTPUT M6 :-

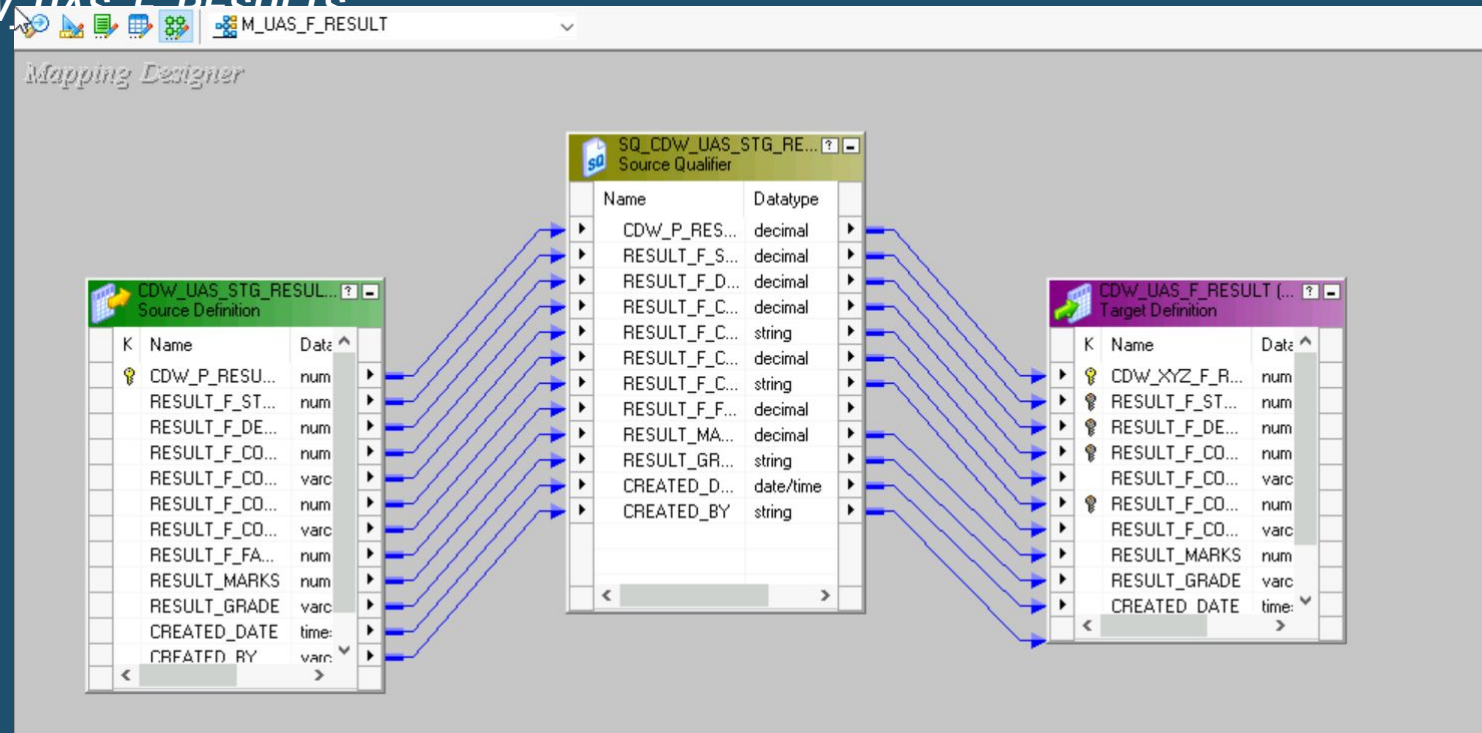

 SQL | Fetched 50 rows in 0.012 seconds

	CD...	RES...	R...	RESULT_F_COLLEGE_CODE	RESULT_F_COLLEGE_NAME	RESU...	RESULT_F_COURSE_NAME	RESUL...	RESULT_MARKS	RESULT_GRADE	CREATED_DATE	
1	1810	2077	1	124142436	Hansraj College	101	Introduction to Eng.	414877722	60 FAIL	28-03-24 01:23:28.000000000	AM WF	
2	1811	2078	1	981345267	Daulat Ram College	102	Engineering Maths.	962825827	70 PASS	28-03-24 01:23:28.000000000	AM WF	
3	1812	2079	1	674326645	Ramjas College	103	Physics for Eng.	264193159	80 PASS	28-03-24 01:23:28.000000000	AM WF	
4	1813	2080	2	687557867	Miranda House	104	Computer Prog.	67579093	90 PASS	28-03-24 01:23:28.000000000	AM WF	
5	1815	2082	3	654329788	Kirori Mal College	106	Mechanical Eng.	823936141	40 FAIL	28-03-24 01:23:28.000000000	AM WF	
6	1817	2084	1	767646456	St. Stephens's College	108	Thermodynamics	624385021	80 PASS	28-03-24 01:23:28.000000000	AM WF	
7	1818	2085	7	786787878	DD. Upadhyaya College	109	Electrical Eng.	1906337	90 PASS	28-03-24 01:23:28.000000000	AM WF	
8	1819	2086	1	124142436	Hansraj College	110	Civil Eng.	778650625	99 PASS	28-03-24 01:23:28.000000000	AM WF	
9	1820	2087	7	981345267	Daulat Ram College	111	Environmental Eng.	15366924	58 FAIL	28-03-24 01:23:28.000000000	AM WF	
10	1821	2088	2	674326645	Ramjas College	112	Industrial Eng.	103452682	74 PASS	28-03-24 01:23:28.000000000	AM WF	
11	1822	2089	7	687557867	Miranda House	113	Eng. Design	279199482	35 FAIL	28-03-24 01:23:28.000000000	AM WF	
12	1824	2091	7	654329788	Kirori Mal College	115	Robotics	267248075	78 PASS	28-03-24 01:23:28.000000000	AM WF	
13	1826	2093	7	767646456	St. Stephens's College	117	Aerospace Eng.	591036203	56 FAIL	28-03-24 01:23:28.000000000	AM WF	
14	1827	2094	2	786787878	DD. Upadhyaya College	118	Chemical Eng.	997093193	87 PASS	28-03-24 01:23:28.000000000	AM WF	
15	1828	2095	6	124142436	Hansraj College	119	Nuclear Eng.	734411895	90 PASS	28-03-24 01:23:28.000000000	AM WF	
16	1829	2096	6	981345267	Daulat Ram College	120	Petroleum Eng.	718550517	67 FAIL	28-03-24 01:23:28.000000000	AM WF	
17	1830	2097	2	674326645	Ramjas College	121	Software Eng.	395500241	87 PASS	28-03-24 01:23:28.000000000	AM WF	
18	1831	2098	6	687557867	Miranda House	122	Data Science	84204139	86 PASS	28-03-24 01:23:28.000000000	AM WF	

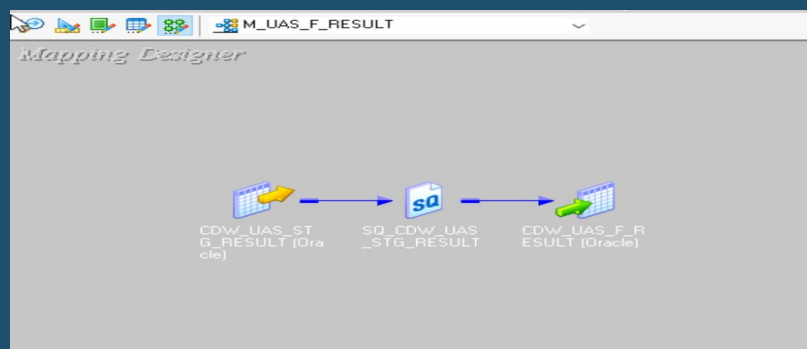
Mapping 7 :-

CDW_STG_RESULTS →

CDW_UAS_F_RESULTS



Iconize Mapping 7 :-



OUTPUT M7 :-

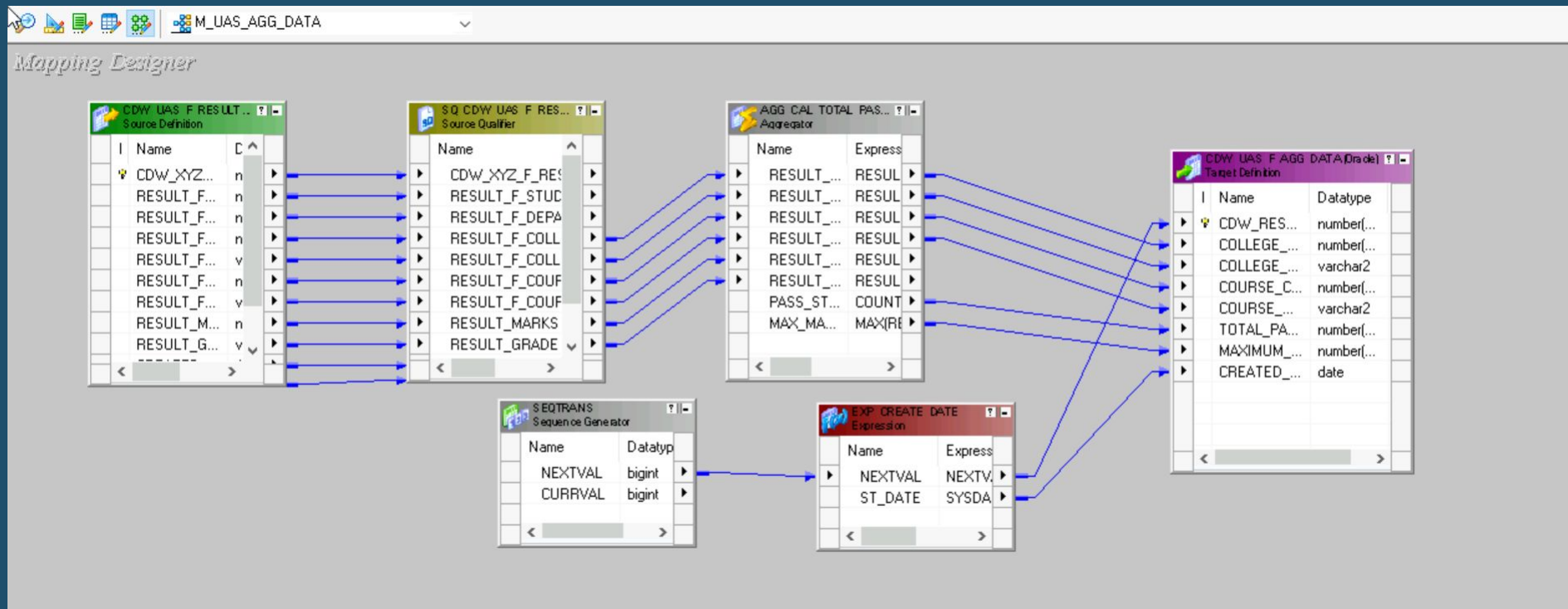
SQL | Fetched 50 rows in 0.012 seconds

	C...	R...	RES...	RESULT_F...	RESULT_F_COLLEGE_NAME	R...	RESULT_F_COURSE_NAME	...	RESULT_GRADE	CREATED_DATE	CREATED_BY
1	1381	7	2050	687557867	Miranda House	135	Systems Eng.	45	FAIL	24-03-24 03:33:56.000000000	PM WF_S_M_UAS_STG_RESULT
2	1383	7	2052	654329788	Kirori Mal College	137	Quantum Mechanics	67	FAIL	24-03-24 03:33:56.000000000	PM WF_S_M_UAS_STG_RESULT
3	1385	6	2054	767646456	St. Stephens's College	139	Industrial Automation	82	PASS	24-03-24 03:33:56.000000000	PM WF_S_M_UAS_STG_RESULT
4	1386	6	2055	786787878	DD. Upadhyaya College	140	Engineering Ethics	85	PASS	24-03-24 03:33:56.000000000	PM WF_S_M_UAS_STG_RESULT
5	1387	2	2056	124142436	Hansraj College	101	Introduction to Eng.	86	PASS	24-03-24 03:33:56.000000000	PM WF_S_M_UAS_STG_RESULT
6	1388	6	2057	981345267	Daulat Ram College	102	Engineering Maths.	95	PASS	24-03-24 03:33:56.000000000	PM WF_S_M_UAS_STG_RESULT
7	1389	3	2058	674326645	Ramjas College	103	Physics for Eng.	83	PASS	24-03-24 03:33:56.000000000	PM WF_S_M_UAS_STG_RESULT
8	1390	6	2059	687557867	Miranda House	104	Computer Prog.	96	PASS	24-03-24 03:33:56.000000000	PM WF_S_M_UAS_STG_RESULT
9	1392	5	2061	654329788	Kirori Mal College	106	Mechanical Eng.	97	PASS	24-03-24 03:33:56.000000000	PM WF_S_M_UAS_STG_RESULT
10	1394	4	2063	767646456	St. Stephens's College	108	Thermodynamics	93	PASS	24-03-24 03:33:56.000000000	PM WF_S_M_UAS_STG_RESULT
11	1395	3	2064	786787878	DD. Upadhyaya College	109	Electrical Eng.	95	PASS	24-03-24 03:33:56.000000000	PM WF_S_M_UAS_STG_RESULT
12	1396	6	2065	124142436	Hansraj College	110	Civil Eng.	94	PASS	24-03-24 03:33:56.000000000	PM WF_S_M_UAS_STG_RESULT
13	1397	3	2066	981345267	Daulat Ram College	111	Environmental Eng.	86	PASS	24-03-24 03:33:56.000000000	PM WF_S_M_UAS_STG_RESULT
14	1398	6	2067	674326645	Ramjas College	112	Industrial Eng.	84	PASS	24-03-24 03:33:56.000000000	PM WF_S_M_UAS_STG_RESULT
15	1399	4	2068	687557867	Miranda House	113	Eng. Design	86	PASS	24-03-24 03:33:56.000000000	PM WF_S_M_UAS_STG_RESULT
16	1401	4	2070	654329788	Kirori Mal College	115	Robotics	94	PASS	24-03-24 03:33:56.000000000	PM WF_S_M_UAS_STG_RESULT
17	1403	4	2072	767646456	St. Stephens's College	117	Aerospace Eng.	87	PASS	24-03-24 03:33:56.000000000	PM WF_S_M_UAS_STG_RESULT
18	1404	5	2073	786787878	DD. Upadhyaya College	118	Chemical Eng.	84	PASS	24-03-24 03:33:56.000000000	PM WF_S_M_UAS_STG_RESULT

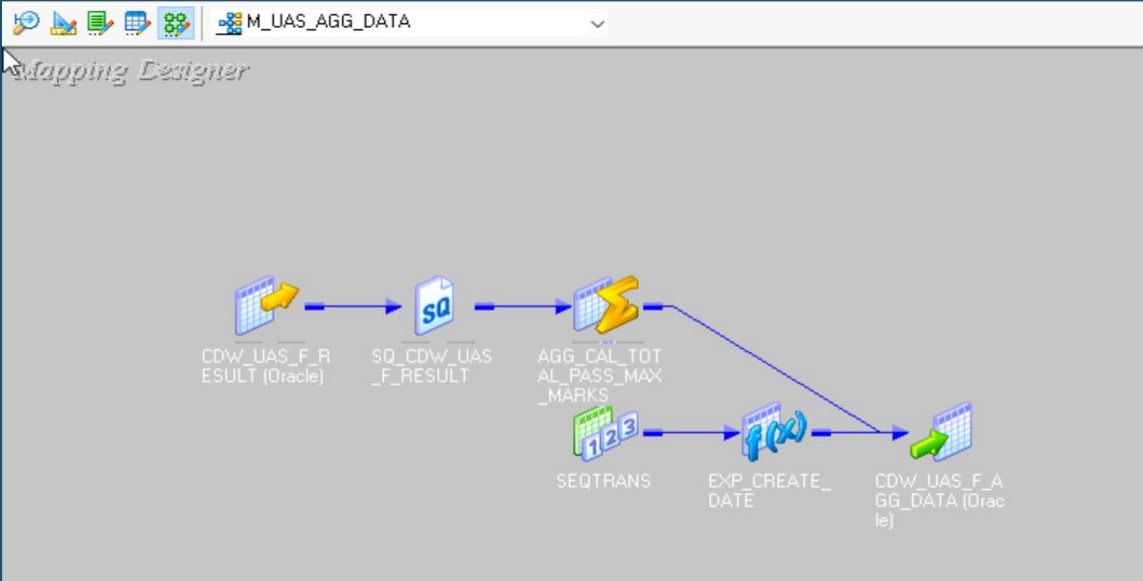
Mapping 8 :-

CDW_UAS_F_RESULTS

CDW_UAS_F_AGG_DATA



Iconize Mapping 8 :-



OUTPUT M8 :- Final Result

SQL | Fetched 50 rows in 0.012 seconds

	CDW_RESULT_AGG_DSET_KEY	COLLEGE_CODE	COLLEGE_NAME	COURSE_CODE	COURSE_NAME	TOTAL_PASS	MAXIMUM_MARK	CREATED_DATE
31	276	981345267	Daulat Ram College	133	Optical Eng.	1	80	25-03-24
32	277	981345267	Daulat Ram College	111	Environmental Eng.	1	86	25-03-24
33	278	981345267	Daulat Ram College	115	Robotics	1	83	25-03-24
34	279	981345267	Daulat Ram College	119	Nuclear Eng.	1	90	25-03-24
35	280	981345267	Daulat Ram College	135	Systems Eng.	1	83	25-03-24
36	281	786787878	DD. Upadhyaya College	104	Computer Prog.	2	78	28-03-24
37	282	786787878	DD. Upadhyaya College	108	Thermodynamics	2	80	28-03-24
38	283	786787878	DD. Upadhyaya College	124	Electrical Pow. Sys.	2	86	28-03-24
39	284	786787878	DD. Upadhyaya College	136	Nuclear Physics	0	45	28-03-24
40	285	786787878	DD. Upadhyaya College	137	Quantum Mechanics	2	88	28-03-24
41	286	786787878	DD. Upadhyaya College	105	Circuit Analysis	2	95	28-03-24
42	287	786787878	DD. Upadhyaya College	109	Electrical Eng.	4	95	28-03-24
43	288	786787878	DD. Upadhyaya College	113	Eng. Design	0	68	28-03-24
44	289	786787878	DD. Upadhyaya College	117	Aerospace Eng.	0	56	28-03-24
45	290	786787878	DD. Upadhyaya College	131	Urban Planning	2	89	28-03-24
46	291	786787878	DD. Upadhyaya College	102	Engineering Maths.	2	94	28-03-24
47	292	786787878	DD. Upadhyaya College	106	Mechanical Eng.	2	82	28-03-24
48	293	786787878	DD. Upadhyaya College	118	Chemical Eng.	4	87	28-03-24

CONCLUSION:-

- ✓ As per the requirements I have successfully upload the source data into targets .
- ✓ As per the requirements I have clean the data and changed the formats of the sources by using multiple type of transformation .
- ✓ I have successfully calculated Total number of students passed for each Course in each College .
- ✓ I have successfully calculated Maximum Mark for each Course taught in each College.

THANK YOU