DM LAB 4

BY

ENG. JOUD KHATTAB

SSIS PRACTICAL EXAMPLE

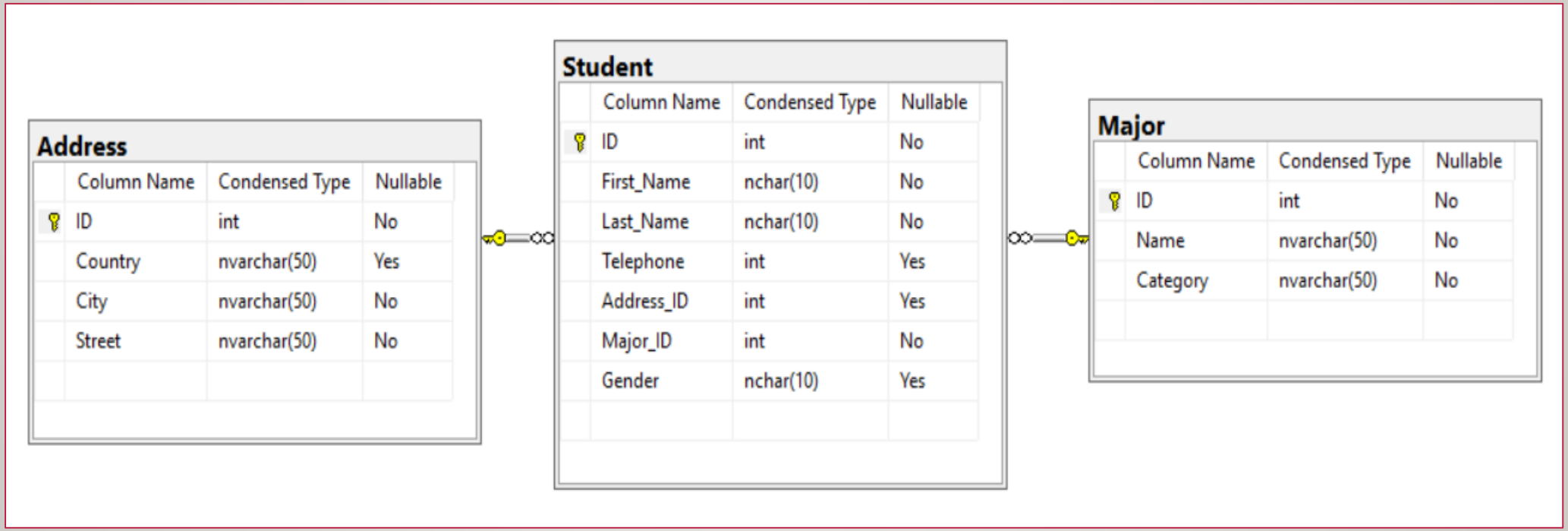
3 SSIS PRACTICAL EXAMPLE

- You will have two data sources:
  - OLE DB
    - Name: University
    - Tables: Student (1000 Record), Address (96 Record), Major (14 Record)
  - Excel DB
    - Name: Institution
    - Sheets: Undergraduate (1960 Record)
- The Expected output:
  - New database with one table contains a merged version of the two data sources.

- First step for you will be to import the databases to your SQL Server.

4 SSIS PRACTICAL EXAMPLE

- OLE DB Diagram:



5 SSIS PRACTICAL EXAMPLE

- OLE DB Diagram: Address Table

ID	Country	City	Street
1	Eire	Glendale	Samoa, ukyp7y, s54m7f
2	Bermuda	Philadelphia	Peru, mao8bobid, 1n3cgpkcgp
3	Kuwait	Nashville	South Africa, bs6dx8wgeq, jzfeb3
4	Samoa	Hialeah	Austria, 5vnjzb, z0p5njlpy
5	Niger	Kansas	Zambia, fuzfcs, lc7w2r
6	NULL	Colorado	Iceland, o6876qr3, hof41j2ut
7	NULL	Fresno	Cyprus, 41hx8z534, vou98b
8	Jamaica	Wichita	Italy, 3umcd3u, zjsu61gb
9	Guatemala	Minneapolis	Guinea, wadmsk, bh4ruvqoje
10	United States	Tacoma	Syria, vqzs3go, uu04eo83c
11	Belize	Austin	Chile, 2kcor6bw, 4qbt8ic
12	New Caledonia	San Antonio	Nicaragua, zbz4f41qpr, vdih70
13	NULL	Los Angeles	Bulgaria, xtt2rc, 5oxotchhm

6 SSIS PRACTICAL EXAMPLE

- OLE DB Diagram: Major Table

ID	Name	Category
1	NationalSales	Metals & Minerals
2	Service	Railways
3	BusinessSales	Sports & leisure Infrastructure
4	TechnicalSales	Healthcare & Medical
5	Accounting	Financial Services
6	Prepaid Customer	Chemicals
7	InternationalSales	Leisure & Tourism
8	AccessorySales	Business (& Consumer) Services
10	ConsumerSales	Leisure & Tourism
11	Technical	Chemicals
12	Marketing	Food & Drink
13	Cutomer	Textiles, Interior Textiles & Carpets

7 SSIS PRACTICAL EXAMPLE

- OLE DB Diagram: Student Table

ID	First_Name	Last_Name	Telephone	Address_ID	Major_ID	Gender
1	Ginger	Huang	2985064	79	12	female
2	Jami	Watts	6570190	54	13	male
3	Erika	English	4531520	54	12	male
4	Jeffrey	Cole	3966506	43	8	female
5	Tania	Hardin	2829568	27	3	female
6	Ginger	Torres	9309576	45	8	female
7	Frank	Todd	8832824	46	14	male
8	Alan	Faulkner	4571992	3	7	female
9	Norma	York	7484520	96	15	male
10	Claudia	Aguilar	6239851	31	4	female
11	Esther	Charles	3935971	82	5	NULL
12	Alfred	Petty	7413775	4	7	NULL
13	Wallace	Bonilla	6353027	51	10	NULL

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- Excel DB Diagram:

ID	Name	Title	Tel	Sex	Major	Major_Cat	Country	City
1	Dion55	Mrs	6811293586	M	Seafood	Railways	Honduras	Garland
2	Jared336	Mr	0917424094	M	Seafood	Household Goods, Furniture	Syria	Milwaukee
3	Kellie919	Mr	5342508548	M	Confection	Textiles, Interior Textiles & Carpets		Atlanta
4	Latisha73(	Mrs.	8584434670	F	Grain	Power	Nigeria	Austin
5	Brent231	Mrs	0777217580	F	Poultry	Sports & leisure Infrastructure	Aruba	Madison
6	Isaac753	Mr	3633696678	F	Snails	Ports & Logistics	Guinea-Bissa	Colorado
7	Marvin826	Mr	5007724296	M	Beverage	Leisure & Tourism	Norway	Toledo
8	Mitchell35	Ms.	2799951712	F	Snails	Fire, Police & Security	Argentina	Cincinnati
9	Kellie2	Mr		F	Grain	Metals & Minerals	Uzbekistan	Bakersfield
10	Heather75	Mr	0071936065	M	Beverage	Food & Drink	Sri Lanka	El Paso
11	Dena27	Mr	1883344215	F	Snails	Metals & Minerals	Swaziland	Washington
12	Paul759	Dr		M	Meat	Business (& Consumer) Serv	Jordan	Akron
13	Ricky094	Dr.	7333886179	F	Dairy	Mining	Ukraine	Indianapolis
14	Raquel50	Dr	0357358642	M	Dairy	Leisure & Tourism	Jersey	Norfolk
15	Bernard78	Mr	8758581982	M	Poultry	Chemicals	Bermuda	Louisville
16	Byron893	Mr	8727093119	M	Beverage	Oil & Gas	Tajikistan	Chicago
17	Pete320	Mr	7056910090		Snails	Environment	India	Cleveland
18	Ryan258	Dr	1164735784	M	Beverage	Metals & Minerals	Singapore	Little Rock
19	Betty104	Mrs.	3316468893	F	Produce	Power	Grenada	Dayton

9 SSIS PRACTICAL EXAMPLE

1. Make new SSIS project.
2. Prepare all DB connections.
3. Add a script containing welcoming message "Hello World".
4. Add new data flow tasks.
5. Add four connection strings:
    1. One for the Excel connection.
    2. Three for each table of OLE connection.
6. Sort all data sources by ID.
7. Modify OLE DB:
    1. Join all OLE DB tables;
        1. This will require to resort Student table. (By Address_ID).
        2. This step must be split into two steps (cant join three tables at the same time).
8. Continue Modifying OLE DB:
    1. Recalculate county column from street column.
9. Modify Excel DB:
    1. Change columns data types to fit OLE DB.
    2. Split Name columns to two columns.
    3. Change gender value from (F,M) to (Female, Male).
10. Union the two data sources.
11. Remove all records in all data sources that contains NULL gender column.
12. Upload to a new DB from your choice.

THE END