Experiment No-2

Demonstration of data Profiling using SQL Server Integration Servies.

Uses of data Profiling → used to identify Problem in data
→ help in assessment of data quality
→ help to understand content, structure, relationships, etc
→ in deep understanding data in table

[Product][Product] / [dbo][OimProduct

① Data Profiling Task drop & drag
↳ click on it → Create destination file → new file name file:// myfile.xml
then click quick Profile option — new connection (INDIPCMSSQLSERVER2)
Connect to db select db Adventure Work 2012 then
test connect Righ side option
then ok click
then Select table u get

then execute then double click then open open Profile viewer
optin

Exp 4

Simple ETL Transformation

Last Step Click on [dbo].[Stud] table to see all record

we have converted ~~connected~~ smallen to upper

step → create a table → dbo.student

colmn Name	
StudID	int
Name	nvarchar(50)

In PC create a S1.csv file store this →

```
Stud_id, Name
1, xyz
2, abc
```

Start SQL server data tools

File → new Project

① drag & drop → data Flow Task then double click

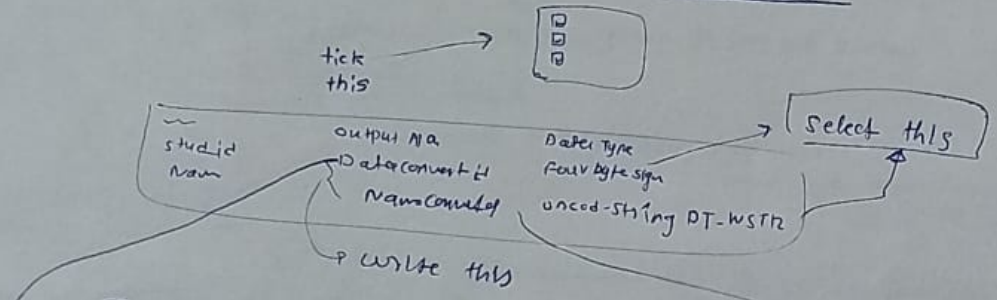
empty page display

② From other sources → drag & drop → Flat File source

double click

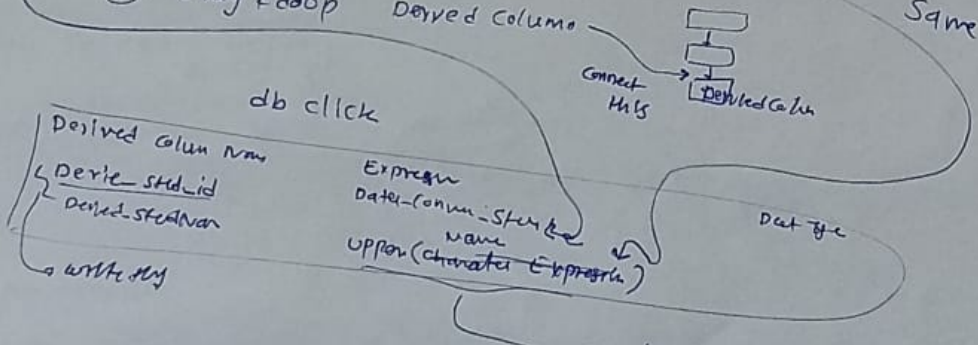
then choose your S1.csv file, also choose right extension for it

③ drag & drop from Common → data conversion



④ drag & drop Derived Column

Same name

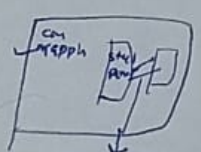


→ deselect this Run above option (available in string Run)

click ok

⑤ OLE DB destination

click then connection then Table view option select [dbo].[stud]



Connect this DerivedStudID & Derived_Stude_Name to Stud_id & Name

Execute

Exp-5

Lookup Transformation

- Loopup transformation means to match two tables, and to take decision that both tables matches or not.
  [Fetch From source to destination]

① Create a table

```
Create table dbo.books {
    BookID int primary key clustered,
    [Book Title] NVARCHAR (100),
    [Book Price] money
}
```

```
Insert into dbo.books values
    (1, 'SQL', 500)
    (2, 'oracle', 700),
    (          )
```

Create table dbo.bookshistory {

=

3

---

② drag & drog Data Flow task double click

③ OLE DB Source → new connection then ok then select ~~book~~ [dbo].book ok

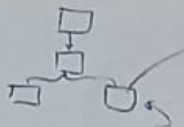
④ Lookup drag & drog then connect (general) (select Redirect rows to ~~no match~~ match output) ok

(select destination table dbo.bookshistory
(Book id connect only) ok

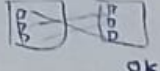
⑤ drag & drog OLE DB destination (connect with Lookup no match)
select destination only
allset (do all above 4 step connect all already)

Then Execute it

matching record updated
Case - 2



db click select db then go on Connection write SQL command Set all as ?



ok click

drag & drog OLE DB command

```
UPDATE [AdventureWorks2012].[dbo].[bookshistory]
SET
    [Book Title] = ?,
    [Book Price] = ?
WHERE [BookID] = ?,
```

Execute

Ex-6

Slowly changing Dimension

① drag & drop data Flow task double click

② OLE DB source (configure it connection, select [dbo] test_stage)

③ slowly changing Dimension → click → select destination [dbo] [test]

Empid Business-key → select it

next → Next

Dimension Column Change type
Country Historical change attribute
Emp-Name Changing attribute

→ Next then

click use start & end date to identify

Start date start_date → Select this
end End_date → Select this

Variable to set value System Containers StartTime

Next tick box

☑ Enable inferred number support

Next → Finish

Execute

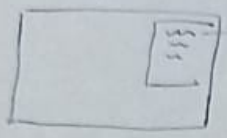
Insert Design

When we insert new record old record is also saved

Exp-8

Cube Creation & Analysis

- SQL server management → click then → select → device click → your db → AdventureWorkDB2012
- Open data ware tool → select new Project then → Select Analysis Servies (Jump)



① Click on data Sources
- add server name
- connect to db → select option → AdventureWorkDB2012 → Click Next
- write username & passwod → select Inherit next Finish

② Data source views
- new Data source view → next
- drag & drop → FactInternetSales[dbo] → add Related Tables (after drag)
  - (remove FactInternetSalesPenny)
  - DimSales Territory dbo
  - DimProduct dbo
  - Dimdate
  - Dim Customer dbo
  - } related tables remove remaing

Click Next → finish

③ cubes → next → click on suggest → next → Finish

④ Dimension → click on Dim Datedim
- select Finalyear drag & drog
- Dim Sales Territory
  - SalesTerritoryRegion drag on drop
- dim Product dem
  - EnglishProductNam drag & drog

I can Find out Sales From region, Product Name, year Point of view

Click on Project name
- then → Deployment option
  - Set your server name
  - write this inplace of localname

Right Click → Click

Now Select Buid (we can see on left bottom success)

Then select Deploy

Now Click on Cuble → click on this
- Right click → AdventureWorkDB 2012 then Select Browse option

Click on Measure
- Sales amount option

then den customen option → Dimension Territory → Sales Territory Regin Equal Australia