

MODULE 4 - IICS

Data Source 1: Inpatient_provdr_Covid_Healthcare

SLOWLY CHANGING DIMENSION

SOURCE TABLE (SQL DB)

ProviderDetailss Table

```
CREATE TABLE ProviderDetailss
(
    Provider_ID FLOAT PRIMARY KEY,
    Drug_ID FLOAT,
    Provider_Name VARCHAR(50) NOT NULL,
    Provider_Zip_Code FLOAT
)
```

```
SELECT * FROM ProviderDetailss
```

TARGET TABLE (SQL DB)

```
CREATE TABLE ProviderDetailss_SCDIICS
(
    Provider_Key FLOAT,
    Provider_ID FLOAT,
    Drug_ID FLOAT,
    Provider_Name VARCHAR(50),
    Provider_Zip_Code FLOAT,
    Checksum VARCHAR(50),
    Start_Date DATE,
    End_Date DATE
)
```

```
SELECT * FROM ProviderDetailss_SCDIICS
```

```
DROP TABLE ProviderDetailss_SCDIICS
```

```
-- SCD1
```

```
--(Can be loaded and Updated)
```

```
UPDATE ProviderDetailss SET DRUG_ID=40 WHERE Provider_ID=10001
```

```
-- SCD2
```

```
--(Can be loaded and stores historical data as well as new record)
```

```
UPDATE ProviderDetailss SET DRUG_ID=40 WHERE Provider_ID=30012
```

.....

AGGREGATE

SOURCE TABLE (SQL DB)

```
CREATE TABLE ProviderDetailss
(
    Provider_ID FLOAT PRIMARY KEY,
    Drug_ID FLOAT,
    Provider_Name VARCHAR(50) NOT NULL,
    Provider_Zip_Code FLOAT
)
```

```
SELECT * FROM ProviderDetailss
```

TARGET TABLE (SQL DB)

--Minimun of Provider_Zip_Code, Group by Drug_ID

```
SELECT * FROM Aggregate_ProviderSSIS
```

.....

REPLICATION TASK

SOURCE TABLES (SQL DB)

```
CREATE TABLE ProviderDetailss
(
    Provider_ID FLOAT PRIMARY KEY,
    Drug_ID FLOAT,
    Provider_Name VARCHAR(50) NOT NULL,
    Provider_Zip_Code FLOAT
)
```

```
SELECT * FROM ProviderDetailss
```

```
CREATE TABLE ProviderAddress
(
    Provider_ID FLOAT CONSTRAINT FK_ID REFERENCES ProviderDetails(Provider_ID),
    Provider_Street_Address VARCHAR(50) UNIQUE
)
```

```
SELECT * FROM ProviderAddress
```

TARGET TABLE (SQL DB)

```
SELECT * FROM REP_ProviderDetails
```

```
SELECT * FROM REP_ProviderAddress
```

Data Source 2: Incurance Claim_State_Health_Data

SLOWLY CHANGING DIMENSION

SOURCE TABLE (SQL DB)

--PatientDetailss Table

```
CREATE TABLE PatientDetailss
(
    PID INT PRIMARY KEY,
    AGE INT,
    GENDER VARCHAR(50),
    DISTRICT_NAME VARCHAR(50),
    CATEGORY_CODE VARCHAR(50)
)
```

```
SELECT * FROM PatientDetailss
```

TARGET TABLE (SQL DB)

```
CREATE TABLE PatientDetailss_SCDIICS
(
    P_Key INT,
    PID INT,
    AGE INT,
    GENDER VARCHAR(50),
    DISTRICT_NAME VARCHAR(50),
    CATEGORY_CODE VARCHAR(50),
    Checksum VARCHAR(50),
    Start_Date DATE,
    End_Date Date
)
```

```
SELECT * FROM PatientDetailss_SCDIICS
```

```
DROP TABLE PatientDetailss_SCDIICS
```

-- SCD1

--(Can be loaded and updated)

```
UPDATE PatientDetailss SET CATEGORY_CODE= 'M5' WHERE PID=1
```

-- SCD2

--(Can be loaded and stores historical data as well as new record)

```
UPDATE PatientDetailss SET CATEGORY_CODE= 'S7' WHERE PID=30
```

.....

AGGREGATE

SOURCE TABLE (SQL DB)

--PatientDetailss Table

```
CREATE TABLE PatientDetailss
(
    PID INT PRIMARY KEY,
    AGE INT,
    GENDER VARCHAR(50),
    DISTRICT_NAME VARCHAR(50),
    CATEGORY_CODE VARCHAR(50)
)
```

```
SELECT * FROM PatientDetailss
```

TARGET TABLE (SQL DB)

--Minimun of AGE Group By GENDER

```
SELECT * FROM Aggregate_PatientIICS
```

.....

REPLICATION TASK

SOURCE TABLES (SQL DB)

```
CREATE TABLE PatientDetailss
(
    PID INT PRIMARY KEY,
    AGE INT,
    GENDER VARCHAR(50),
    DISTRICT_NAME VARCHAR(50),
    CATEGORY_CODE VARCHAR(50)
)
```

```
SELECT * FROM PatientDetailss
```

```
CREATE TABLE SurgeryDetailss
(
    CATEGORY_CODE VARCHAR(50),
    CATEGORY_NAME VARCHAR(50),
    SURGERY_CODE VARCHAR(50),
    SURGERY VARCHAR(100)
)
```

```
SELECT * FROM SurgeryDetailss
```

TARGET TABLE (SQL DB)

SELECT * FROM REP_PatientDetailss

SELECT * FROM REP_SurgeryDetailss