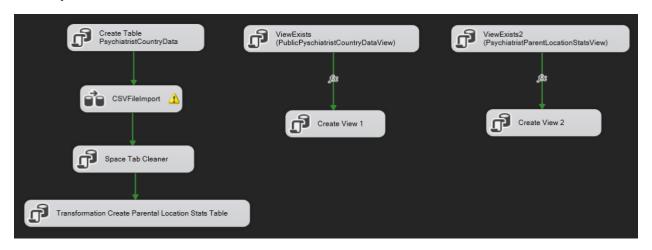
Tools: 2019 Visual Studio SSIS | SSRS | SQL Server 2019

Source Data: https://www.who.int/data/gho/data/indicators/indicator-details/GHO/psychiatrists-working-in-mental-health-sector-(per-100-000)





SSIS Project:



SSIS_Project_ETL_1_Re SSIS Report: porting.sln

Pyschiatrist Parent Location Stats Report

Parent Location	Number Of Countries	Psychiatrist Parent Location Averages	Performing	Best Performing Country Psychologist s Per100k
Africa	36	0.271444	Mauritius	2.3800
Americas	28	4.055892	Argentina	21.7100
Eastern Mediterranean	15	1.393333	Bahrain	5.4700
Europe	40	12.894500	Norway	48.0400
South-East Asia	10	0.569100	Maldives	2.3900
Western Pacific	17	4.941764	New Zealand	28.5400

Tools: 2019 Visual Studio SSIS | SSRS | SQL Server 2019

ETL Breakdown(FULL VISUAL)



DROP TABLE IF EXISTS [dbo].[PsychiatristCountryData]

IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[dbo].[MyTable]') AND type in (N'U'))

CREATE TABLE [dbo].[PsychiatristCountryData] (

ParentLocationCode NVARCHAR(50),

ParentLocation NVARCHAR(100),

LocationType NVARCHAR(50),

LocationCode NVARCHAR(100),

Location NVARCHAR(100),

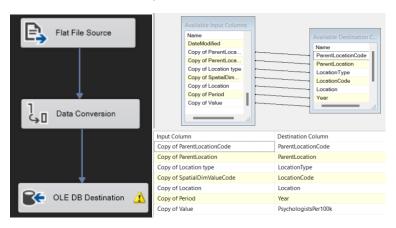
Year NVARCHAR(50),

PsychologistsPer100k DECIMAL(10, 4)

);



Data Flow for CSVFileImport



Flat file connection manager:

Psychiatrists_Mental_Health_Sector_Per_Country_Data

Tools: 2019 Visual Studio SSIS | SSRS | SQL Server 2019



-- Calls on procedure to clean double spaces, tabs, trim etc.

EXEC dbo.CleanseTableColumns 'PsychiatristCountryData', 'dbo';

```
Transformation Create Parental Location Stats Table
```

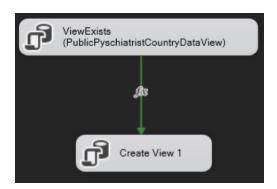
IF OBJECT_ID('LMDatabase.dbo.PyschiatristParentLocationStats', 'U') IS NOT NULL

```
DROP TABLE [LMDatabase].[dbo].[PyschiatristParentLocationStats];
WITH BestPerformingCountriesCTE AS (
  SELECT [ParentLocation]
     ,[Location] AS BestPerformingCountry
     ,[PsychologistsPer100k] AS BestPerformingCountryPsychologistsPer100k
     ,ROW_NUMBER() OVER (PARTITION BY [ParentLocation] ORDER BY [PsychologistsPer100k] DESC)
AS CountryRank
  FROM [LMDatabase].[dbo].[PsychiatristCountryData]
, ParentLocationData AS (
  SELECT [ParentLocation]
     ,COUNT(DISTINCT [Location]) AS NumberOfCountries
     ,AVG([PsychologistsPer100k]) AS [PsychiatristParentLocationAverages]
  FROM [LMDatabase].[dbo].[PsychiatristCountryData]
  GROUP BY [ParentLocation]
SELECT ParentLocationData.[ParentLocation]
  ,ParentLocationData.NumberOfCountries
   ,ParentLocationData.[PsychiatristParentLocationAverages]
   ,BestPerformingCountriesCTE.BestPerformingCountry
,BestPerformingCountriesCTE.BestPerformingCountryPsychologistsPer100k
INTO [LMDatabase].[dbo].[PyschiatristParentLocationStats]
FROM ParentLocationData
```

Tools: 2019 Visual Studio SSIS | SSRS | SQL Server 2019

JOIN BestPerformingCountriesCTE ON ParentLocationData.[ParentLocation] = BestPerformingCountriesCTE.[ParentLocation] AND BestPerformingCountriesCTE.CountryRank = 1;

VIEWS

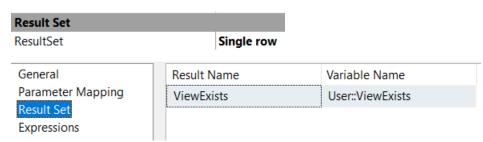


Will create view if it doesn't exist or if its deleted if not it wont process second part.

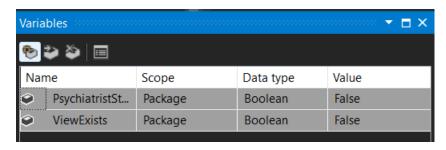
(1st Part | ViewExists)

SELECT CASE WHEN OBJECT_ID('dbo.PublicPyschiatristCountryDataView', 'V') IS NULL THEN CAST(0 AS BIT) ELSE CAST(1 AS BIT) END AS ViewExists;

For it to work needs proper settings:



Set Variable: View -> Other Windows -> Variables



Tools: 2019 Visual Studio SSIS | SSRS | SQL Server 2019



Double Click Green Line to set proper expression

Precedence Constraint Editor		×			
	ines the workflow between two executables. The precedence combination of the execution results and the evaluation of				
Constraint options					
Evaluation operation:	Expression and Constraint				
Value:	Success				
Expression:	@[User::ViewExists] == (DT_BOOL)0 Test				
	multiple constraints, you can choose how the constraints e execution of the constrained task.				
 Logical AND. All constr 	aints must evaluate to True				
O Logical OR. One constraint must evaluate to True					
	OK Cancel Help				

It will then proceed to the second part if the condition is met.

(2nd PART | Create View 1)

#1st part for this is the same as for the other View for instructions it is just the other variable: PsychiatristStatsViewExists

And Expression under Precedence Constraint Editor (Double click green line) is: @[User::PsychiatristStatsViewExists] == (DT_BOOL)0

CREATE VIEW [dbo].[PublicPyschiatristCountryDataView]

AS

SELECT TOP (1000) ParentLocation, Location, Year, PsychologistsPer100k

FROM dbo.PsychiatristCountryData

ORDER BY PsychologistsPer100k DESC;

(2nd PART | Create View 2)

CREATE VIEW [dbo].[PsychiatristParentLocationStatsView]

AS

SELECT ParentLocation, NumberOfCountries, PsychiatristParentLocationAverages, BestPerformingCountry, BestPerformingCountryPsychologistsPer100k

FROM dbo.PyschiatristParentLocationStats;