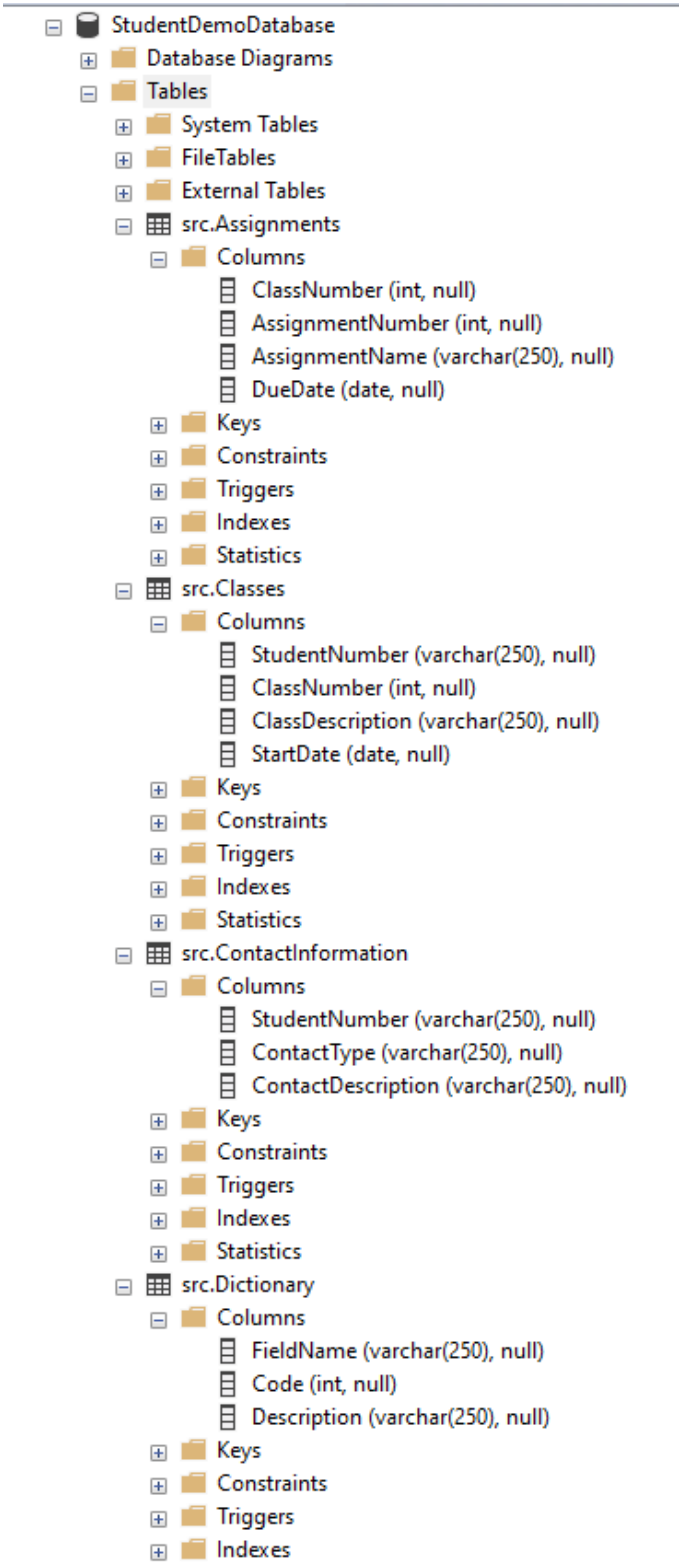
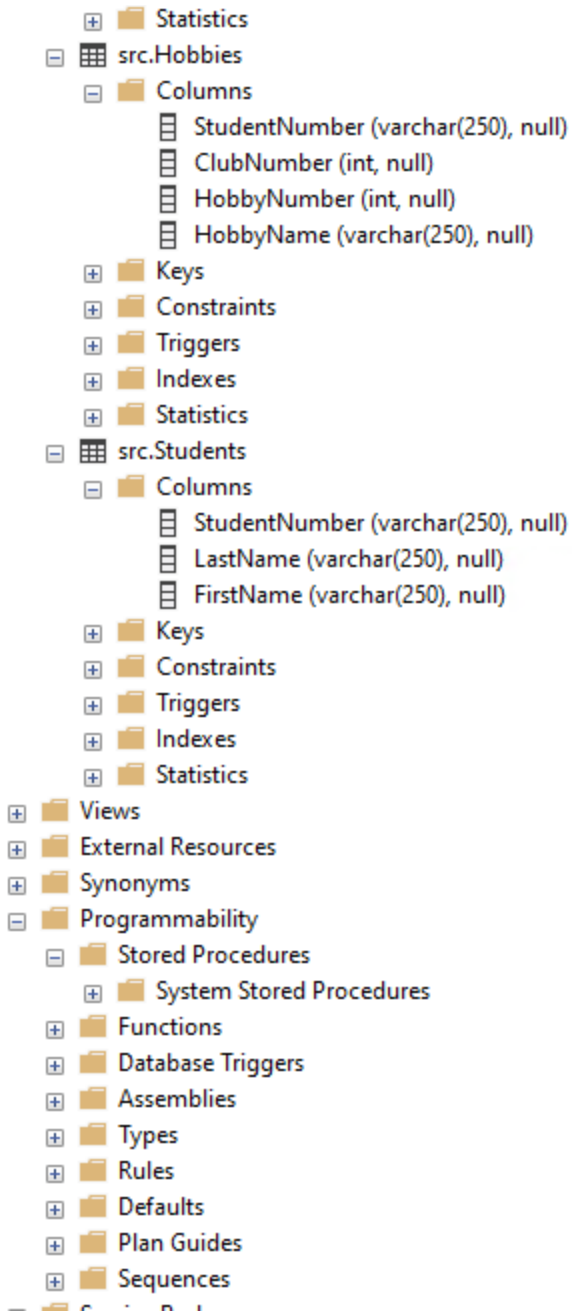
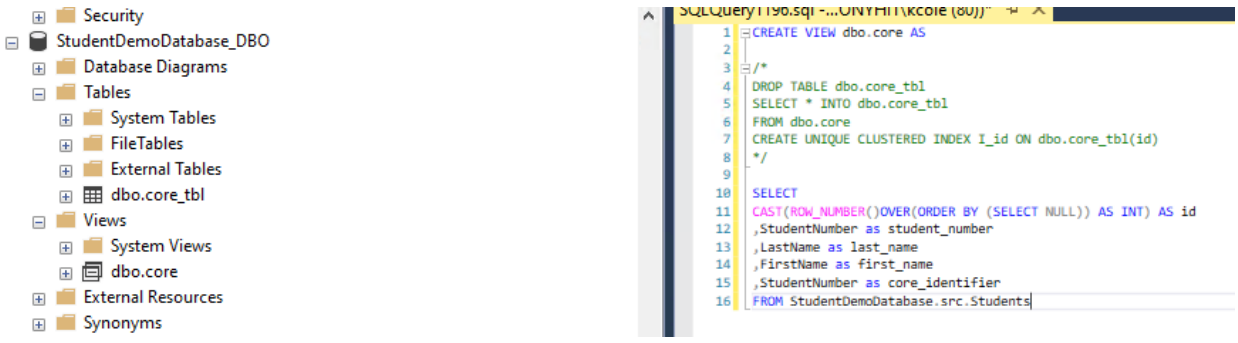
view_builder_demo Screenshots

Views and tables in StudentDemoDatabase before tool runs





Views and tables in StudentDemoDatabase_DBO before tool runs




```
CREATE VIEW dbo.core AS

/*
DROP TABLE dbo.core_tbl
SELECT * INTO dbo.core_tbl
FROM dbo.core
CREATE UNIQUE CLUSTERED INDEX I_id ON dbo.core_tbl(id)
*/

SELECT
CAST(ROW_NUMBER()OVER(ORDER BY (SELECT NULL)) AS INT) AS id
,StudentNumber as student_number
,LastName as last_name
,FirstName as first_name
,StudentNumber as core_identifier
FROM StudentDemoDatabase.src.Students
```

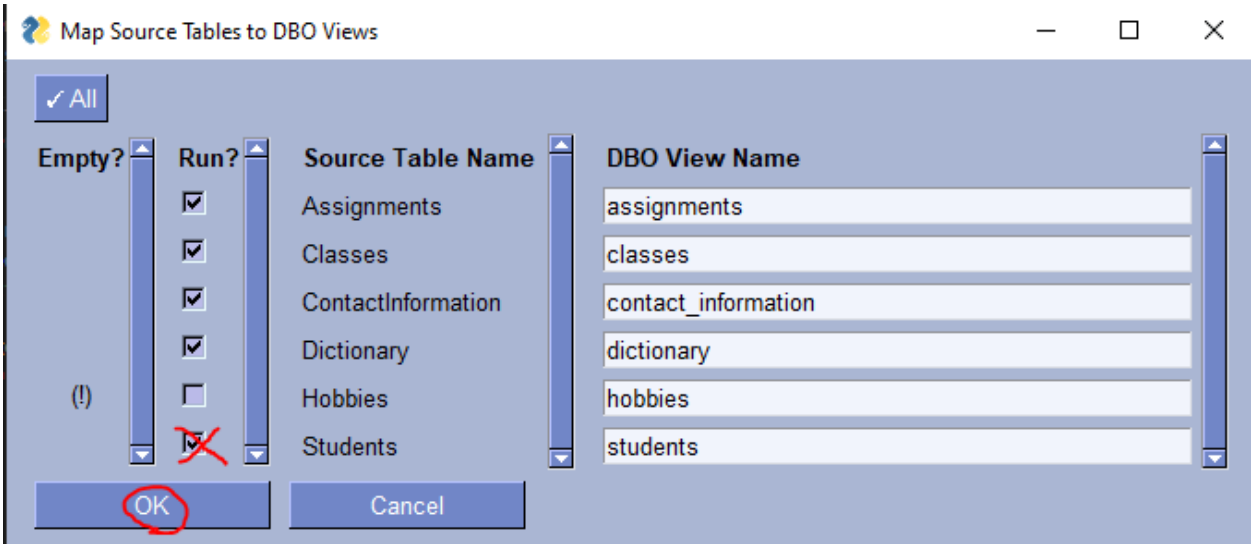
Results | Messages

	id	student_number	last_name	first_name	core_identifier
1	1	12345	Mouse	Mickey	12345
2	2	23456	Mouse	Minnie	23456
3	3	34567	Mallard	Daffy	34567

Arguments in main.py

```
def main():
    #before running this tool, build dbo.core_tbl
    source_server = '[redacted]'
    source_db_database = 'StudentDemoDatabase'
    dbo_database = source_db_database + '_DBO'
    source_table_schema = 'src'
    source_core_id_column = 'StudentNumber'
    ignore_columns = ['StudentNumber'] #columns you want commented out in every view where they occur
```

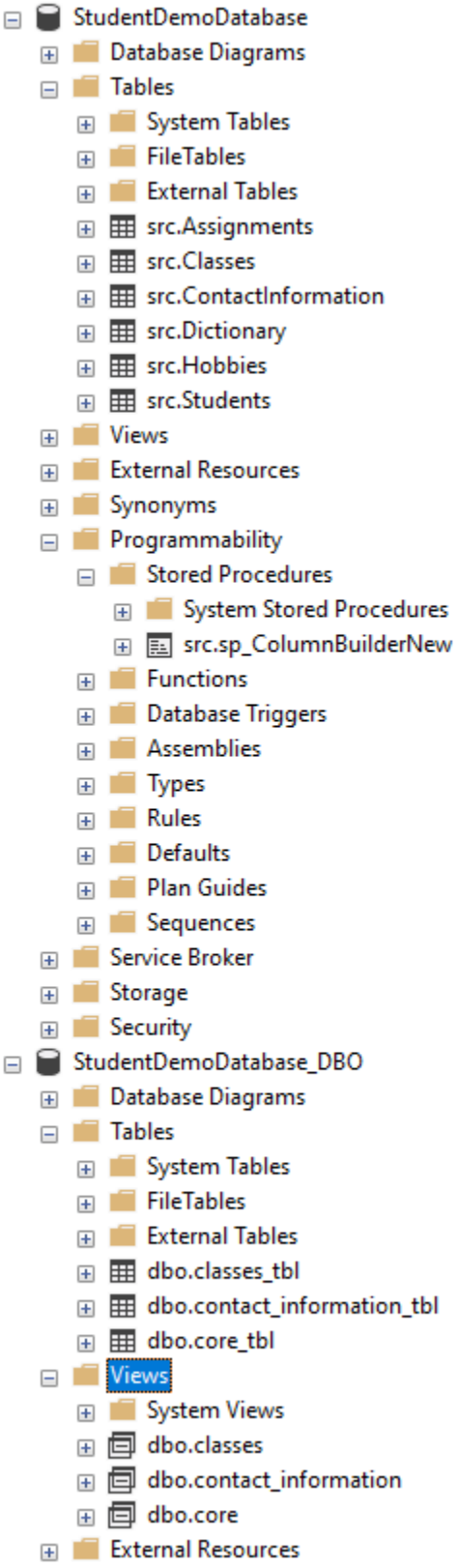
Mapping window (using PySimpleGUI)



Sample output while tool runs

```
Ran query from C:\Users\kcole\Desktop\python_projects\scripts\view_builder_20240529\sql_templates\sp_ColumnBuilderNew.sql

[42S22] Invalid column name 'StudentNumber'.
SQL Insert Failed for assignments

Created view classes

Created view contact_information

[42S22] Invalid column name 'StudentNumber'.
SQL Insert Failed for dictionary

[42S02] Invalid object name 'dbo.assignments'.
***dbo table build FAILURE***: assignments_tbl

dbo table built: classes_tbl

dbo table built: contact_information_tbl

[42S02] Invalid object name 'dbo.dictionary'.
***dbo table build FAILURE***: dictionary_tbl
```

Views and tables after tool runs



View created

```sql
USE [StudentDemoDatabase_DBO]
GO

/****** Object:  View [dbo].[contact_information]    Script Date: 5/30/2024 7:52:45 AM ******/
SET ANSI_NULLS ON
GO

SET QUOTED_IDENTIFIER ON
GO

ALTER VIEW [dbo].[contact_information] AS

/*
DROP TABLE [dbo].[contact_information_tbl]
SELECT * INTO [dbo].[contact_information_tbl]
FROM [dbo].[contact_information]
CREATE UNIQUE CLUSTERED INDEX I_id ON [dbo].[contact_information_tbl](id)

*/

SELECT

     src.[ContactType] as [contact_type]
    , src.[ContactDescription] as [contact_description]

    --, src.[StudentNumber] as [student_number]


--new ids
, CAST(ROW_NUMBER()OVER(ORDER BY (SELECT NULL)) AS INT) as [id]
, CAST(dbo_core.id AS INT) as [core_id]

FROM [StudentDemoDatabase].[src].[ContactInformation] src --count:
INNER JOIN dbo.core_tbl dbo_core
    ON [src].[StudentNumber] = dbo_core.core_identifier --count:



GO


```

Table created

```sql
SELECT TOP (1000) [contact_type]
      ,[contact_description]
      ,[id]
      ,[core_id]
  FROM [StudentDemoDatabase_DBO].[dbo].[contact_information_tbl]
```

74 %

Results | Messages

	contact_type	contact_description	id	core_id
1	Home Phone	111-222-3333	1	1
2	Email	mmouse1@disney.com	2	1
3	Email	mouse2@disney.com	3	2
4	Home Address	123 Happy Lane, Disney, FL 34543	4	2

Sample output of sp_ColumnBuilderNew.sql when run manually

```
USE StudentDemoDatabase
EXEC src.sp_ColumnBuilderNew N'src', N'Assignments';
```

74 %

Results | Messages

	sql_statement	contains_data	COLUMN_NAME
1	, src.[ClassNumber]	SELECT COUNT (*) FROM (SELECT TOP 1 * FROM [src].[Assignments] WHERE NULLIF([ClassNumber],'') IS NOT NULL AND [ClassNumber] <> '0') subq	ClassNumber
2	, src.[AssignmentNumber]	SELECT COUNT (*) FROM (SELECT TOP 1 * FROM [src].[Assignments] WHERE NULLIF([AssignmentNumber],'') IS NOT NULL AND [AssignmentNumber] <> '0') subq	AssignmentNumber
3	, src.[AssignmentName]	SELECT COUNT (*) FROM (SELECT TOP 1 * FROM [src].[Assignments] WHERE NULLIF([AssignmentName],'') IS NOT NULL AND [AssignmentName] <> '0') subq	AssignmentName
4	, ISNULL(TRY_CONVERT(DATETIME,src.[DueDate]),'18...	SELECT COUNT (*) FROM (SELECT TOP 1 * FROM [src].[Assignments] WHERE NULLIF([DueDate],'') IS NOT NULL) subq	DueDate