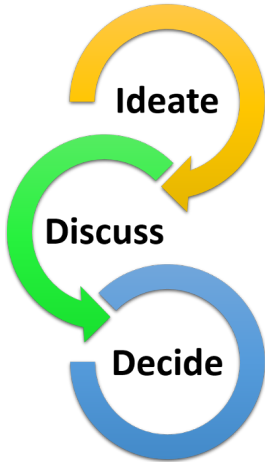


Advanced Analysis with SQL

Follow along at: <http://bit.ly/advanced-analysis-sql>

See the code at: <http://bit.ly/advanced-analysis-sql-code>

Introduction to Data Analytics Review

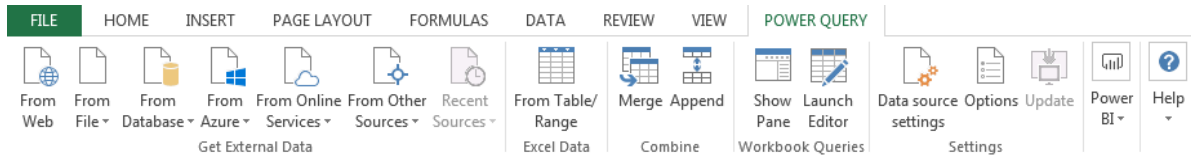
	<p>Our Method for Generating Ideas (Brainstorming)</p> <p>Ideate - Generate at least 3 ideas (ideally more), each on their own Post-It Notes</p> <p>Discuss - Review the ideas generated</p> <p>Decide - Come to a consensus as a group</p>
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Excel I Review

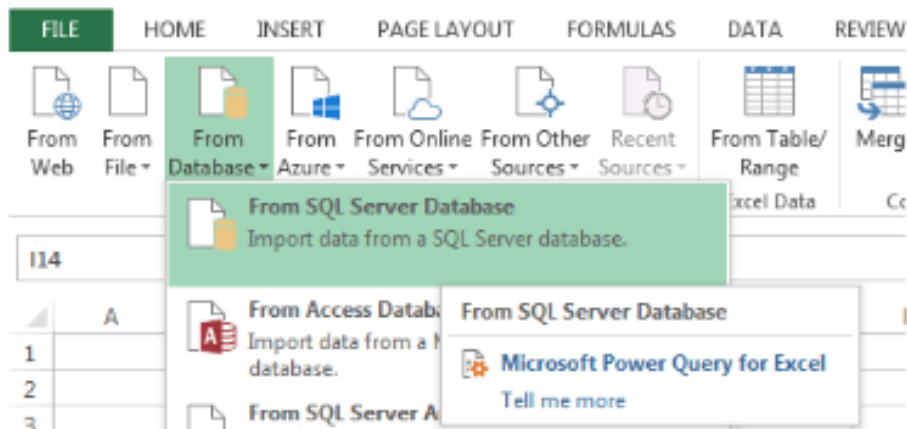
<p>Documenting Your Work</p> <ul style="list-style-type: none"> - Tab in workbook describing source of data, steps in the analysis, and any other important information - Color Code your tabs to categorize your worksheets - Add comments to a cell (right click, insert comment) - Insert comments in a new separate column 	<p>5 Data Analytics Tasks</p> <ul style="list-style-type: none"> - Sort - Filter - Aggregate - Transform - Visualize
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Importing data into Excel with SQL - Importing from a database

- Click on the Power Query ribbon



- Power Query > From Database > From SQL Server Database

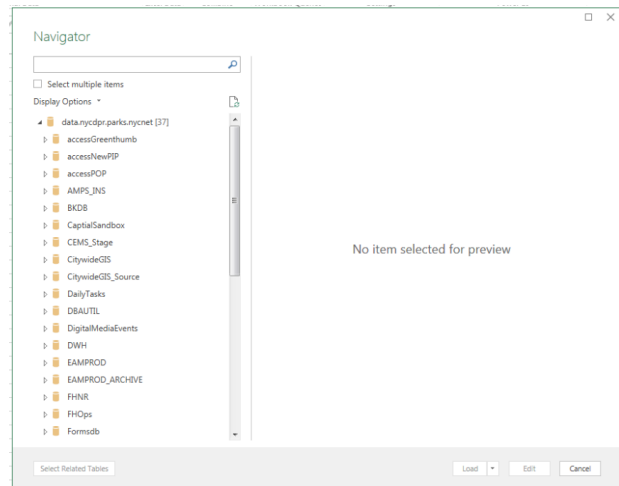


- Enter the server name in the **Server** field

The image shows the 'SQL Server database' dialog box. It has a title bar with a close button (X). The main area contains the following fields and options:

- Server**: A text input field with a help icon (i) to its left.
- Database (optional)**: A text input field.
- Advanced options**: A link with a right-pointing arrow.
- OK** and **Cancel** buttons: Located at the bottom right of the dialog box.

- Preview databases, then click **Load** to load one



Key Questions

- What is a Database?

- What is a Table?

Key SQL Keywords

SELECT		
FROM		
WHERE		
WHERE operators	= - equal to > - greater than >= - greater than or equal to	< - less than <= - less than or equal to != and <> - not equal to

Example Queries

SELECT * FROM tbl_dailytasks	Get all of the columns from the tbl_dailytasks table
SELECT date_created, created_by FROM tbl_dailytasks	Only get the date_created and created_by columns from the tbl_dailytasks table
SELECT * FROM tbl_dailytasks WHERE graffiti = 1	Select the daily tasks rows where graffiti was present
SELECT * FROM tbl_dailytasks WHERE nhours > 1	Select the daily tasks rows where nhours is greater than 1

Data Types in a Database

- Function of Data Types
- Importance of Data Types

Numeric

<code>int</code>	a number with no digits after the decimal point, like 5 or 100349
<code>numeric</code>	a number with digits after the decimal point, like 5.01 or 100.349

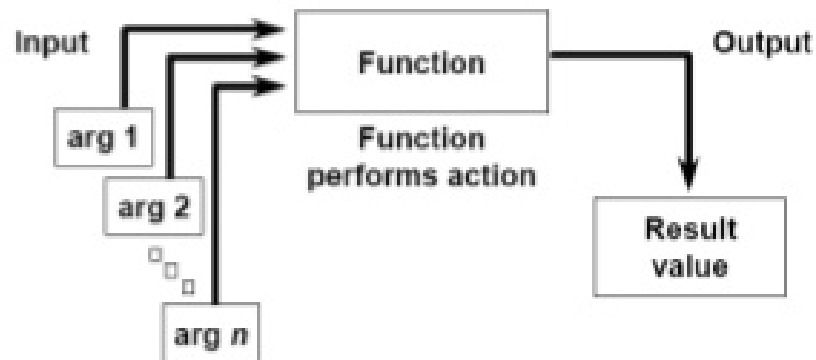
Text

<code>varchar</code>	text with a maximum length, like Queens
<code>text</code>	text with no maximum length, like an open comment field

Other common data types

<code>date</code>	a specific date, like 2002-10-17
<code>datetime</code>	a specific date and time, like 2002-10-17 06:13:00

SQL Functions



Documentation

- Importance
- Best Practices

5 Analytic Tasks in SQL

Sort	
Filter	
Aggregate	

Transform	
Visualize	

Joins in SQL

Key Concepts to Know

Resources

- SQL: One of the Most Valuable Skills - <http://www.craigkerstiens.com/2019/02/12/sql-most-valuable-skill>
- Microsoft SQL Documentation - <https://docs.microsoft.com/en-us/sql/?view=sql-server-2017>
- SQL Zoo - https://sqlzoo.net/wiki/SQL_Tutorial

Contact Us

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Website: <http://www.datapolitan.com>

Your Notes

Implementation Guide

Concept/Technique	Why It's Important	How I Can Use It
What is a Database?		
What is a Table?		
SQL Keywords		
Data Types		
SQL Functions		
Joins in SQL		