Power BI Assignment 5

1. Explain DAX.
   Solution :
   DAX (Data Analysis Expressions) is a formula expression language and can be used in different BI and visualization tools. DAX is also known as function language, where the full code is kept inside a function. DAX programming formula contains two data types: Numeric and Other. Numeric includes - integers, currency and decimals, while Other includes: string and binary object.
   In Power BI, you can use different function types to analyze data, and create new columns and measures. It includes functions from different categories such as −

Aggregate	Text	Date	Logical	Counting
MIN	REPLACE	DATE	AND	DISTINCTCOUNT
MAX	SEARCH	HOUR	OR	COUNT
Average	UPPER	WEEKDAY	NOT	COUNTA
SUM	FIXED	NOW	IF	COUNTROWS
SUMX	CONCATENATE	EOMONTH	IFERROR	COUNTBLANK

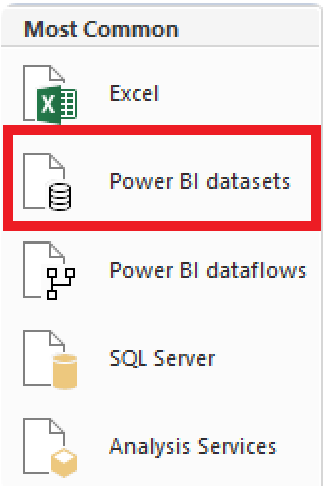
   DAX Calculation Types
   In Power BI, you can create two primary calculations using DAX −

   - Calculated columns
   - Calculated measures

2. Explain datasets, reports, and dashboards and how they relate to each other?
   Solution :
   Datasets:
   Power BI datasets are a ready-to-use source of data for Reporting and Visualization. A dataset is a group of data that you can import or connect to. Power BI allows you to connect to and import various datasets, bringing them all together in one place. Dataflows can also be used to populate datasets.

Workspaces are associated with datasets, and a single Power BI Dataset can be part of multiple workspaces. When you open a workspace, the datasets associated with it are displayed in the Datasets tab.

Each dataset listed is a data source available for one or more reports, and the dataset may contain data from one or more sources. For example, a OneDrive Excel Workbook, an On-Premises SSAS Tabular Dataset, or a Salesforce Dataset. This article explains Power BI datasets in technical terms.
Using the Power BI dataset is one of the simplest connections in Power BI. Choose Get Data -> Power BI datasets.



Reports
A Report is a multi-perspective view of a dataset, with visuals representing different findings and insights.

A report can have one visual or pages full of visuals. Depending on the role of your job, you may be someone who designs reports.

Reports In Power BI Desktop
In the Power BI Desktop Report view, you can create any number of report pages with visualizations. Report view in Power BI Desktop provides a similar design experience to the Report's editing view in the Power BI service.

The difference between them is that in Power BI Desktop, you can work with your model and queries your data to make sure your data supports the best insights in your reports.

3. How reports can be created in power BI, explain two ways with Navigation of each.

   Solution : Power Bi report can be created in following ways

   - Create a report from an Excel file in the Power BI service
   - Create a report quickly from a SharePoint list or library

A) Create a report from an Excel file in the Power BI service

1. Import the Excel file
   - In the navigation pane, select My Workspace.
   - From the bottom of the nav pane, select Get data.
   - Select Files and navigate to the location where you saved the Retail Analysis sample.
   - For this exercise, select Import.
   - Select Open.
   - Select More options (...) next to the dataset, and select Create report.
   - The report editor opens.
   - Add various visuals based on requirements
   - Add various filters.
   - Add back button to navigate to required pages
   - Add today button.

This method of creating a report starts with a file and a blank report canvas.

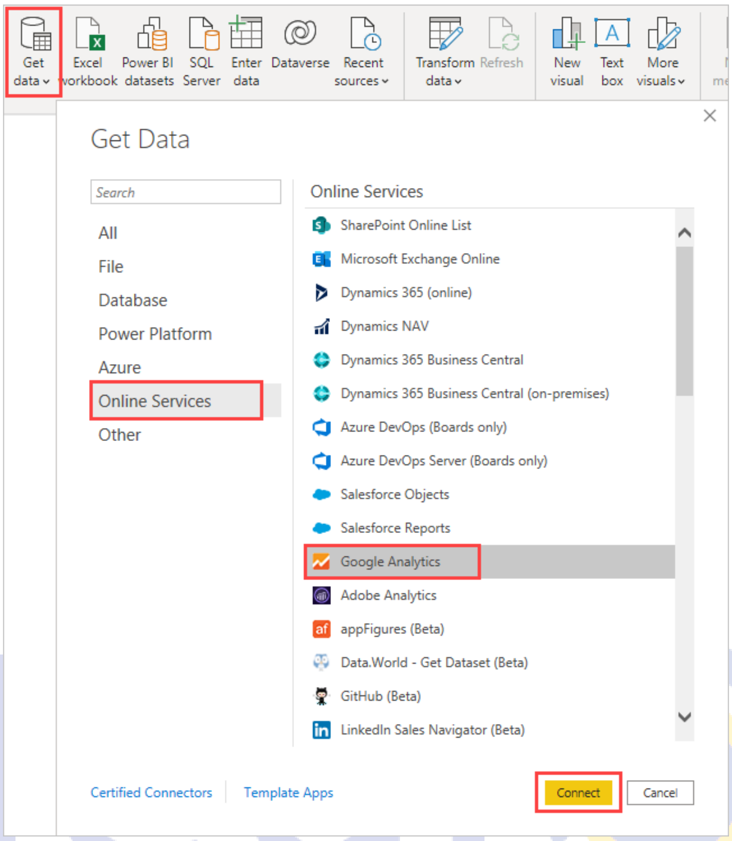
4. How to connect to data in Power BI? How to use the content pack to connect to google analytics? Mention the steps.

   Solution :

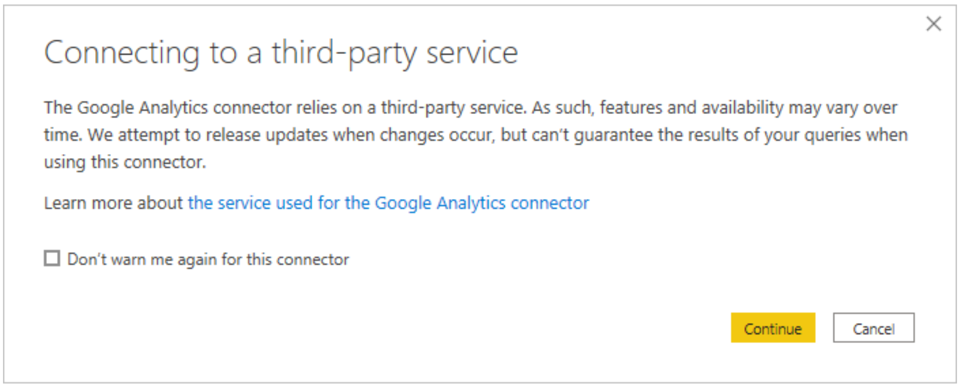
   You can connect to Google Analytics data using the Google Analytics connector. To connect, follow these steps:

   - In Power BI Desktop, select Get data from the Home ribbon tab.

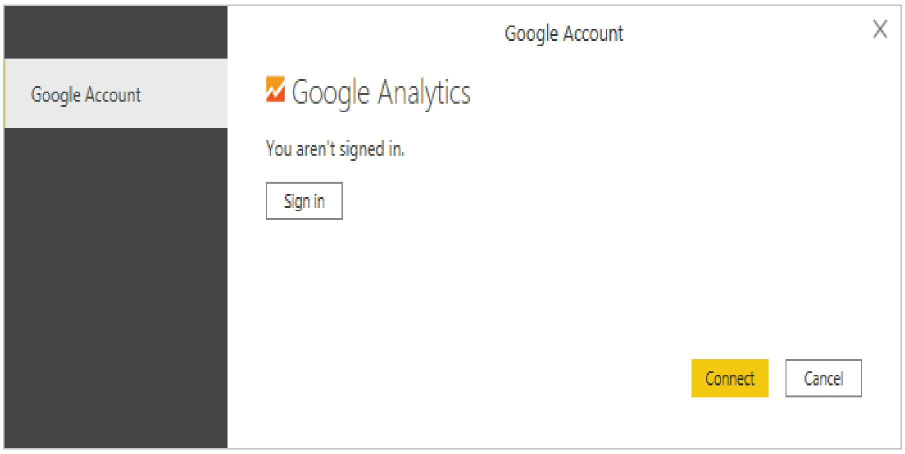
- In the Get Data window, select Online Services from the categories in the left pane.
- Select Google Analytics from the selections in the right pane.
- At the bottom of the window, select Connect.



You're prompted with a dialog that explains that the connector is a Third-Party Service, and warns about how features and availability may change over time, and other clarifications.

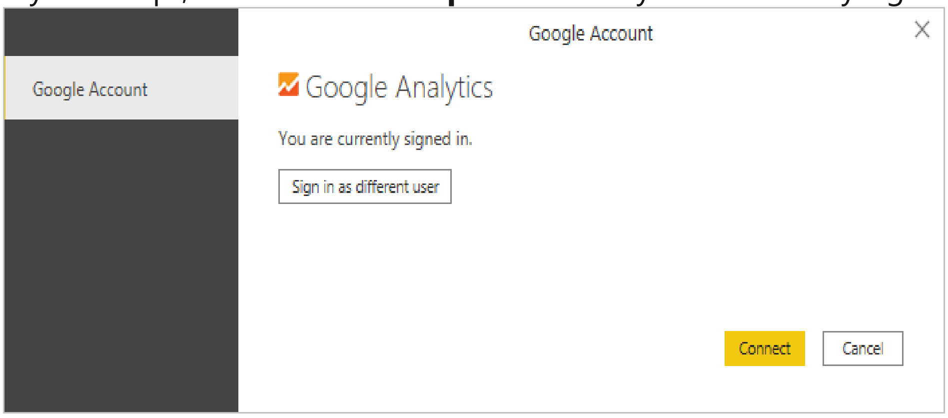


When you select Continue, you're prompted to sign in to Google Analytics.

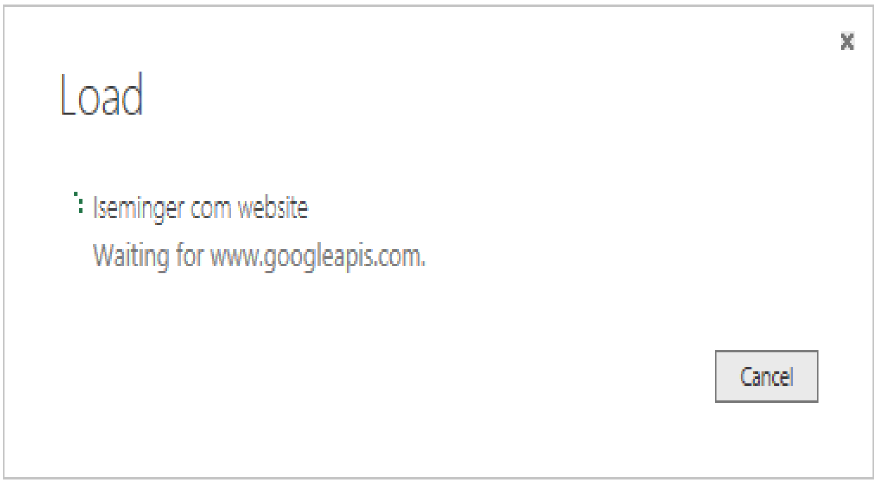


When you enter your credentials, you're prompted that Power BI would like to have offline access. This is how you use Power BI Desktop to access your Google Analytics data.

Once you accept, **Power BI Desktop** shows that you're currently signed in.



Select **Connect**, and your Google Analytics data is connected to **Power BI Desktop**, and loads the data.



5. How to import Local files in Power BI? Mention the Steps.

   Solution :

   Manually import data to Power BI

   1. In Power BI, click Get Data in the lower left screen.
   2. Under Import or Connect to Data > Files, click Get.
   3. Click Local File.
   4. Choose which file to upload and click Open.
   5. Click Upload under Upload your Excel file to Power BI.
   6. The message “Your file has been uploaded” should appear.

7. In Power BI visualization, what are Reading View and Editing view?

   Solution :

   The Power BI service has two different modes for interacting with reports: Reading view for report business users and Editing view for report owners and creators. You need a Power BI Pro or Premium Per User (PPU) license to share reports and to edit reports created by others.

   Reading view

   There are two modes for interacting with reports in the Power BI service: Editing view and Reading view. If you are a business user, then you are more likely to use Reading view to consume reports created by others. Editing view is used by report designers, who create the reports and share them with you. Reading view is your way to explore and interact with reports created by colleagues.

   Even in Reading view, the content isn't static. You can dig in, looking for trends, insights, and other business intelligence. Slice and dice the content, and even ask it questions using your own words. Or, sit back and let your data discover interesting insights for you; send you alerts when data changes, and email reports to you on a schedule you set. All your data, any time, in the cloud or on-premises, from any device.

   In report Editing view, you have flexibility in both exploring and designing a report. All the Reading view functionality is available, plus much more. Assign workspace roles to users so that they can edit reports. Editing view is only available to the person who created the report or to people who are assigned the member, admin, or contributor role in the workspace where the report is stored. If you share a report, the user's access will be limited to their assigned workspace role. Users who have only the viewer role will can't edit reports in the workspace.

Editing view is required for the following actions:

- Creating, editing, renaming, sharing, and deleting reports.
- Adding, renaming, rearranging, and deleting report pages.
- Formatting reports.
- Adding visualizations, text boxes, shapes, and buttons to a report.
- Adding visual-level, page-level, and report-level filters and setting visual interactions.
- Creating refresh schedules.
- Using Q&A functionality to create visuals in reports.
- Showing data used to create the visualization.
- Setting up drillthrough.
- Duplicating a report page.
- Using report settings to control your readers' interactions with reports.