Power Query:

Power Query is a data transformation and data connectivity tool developed by Microsoft. It is primarily used in conjunction with Microsoft Excel and other Microsoft Office products, such as Power BI and SQL Server Integration Services (SSIS). Power Query allows you to connect to various data sources, transform and shape the data according to your needs, and load the transformed data into your preferred destination for analysis or reporting.

Key features of Power Query include:

- Data Connectivity: Power Query supports a wide range of data sources, including databases, files (Excel, CSV, XML, JSON, etc.), online services (SharePoint, OData feeds, Web APIs), and more. It provides a unified interface for connecting to and retrieving data from these sources.
- 2. Data Transformation: Power Query offers a user-friendly interface for performing various data transformation tasks such as filtering, sorting, merging, appending, pivoting, and aggregating data. These transformations are performed using a visual, step-by-step approach.
- 3. Query Editor: Power Query includes a Query Editor window that displays the applied transformations in a series of steps. Users can easily modify, add, or remove transformations and preview the results in real-time.
- 4. M Formula Language: Power Query uses a formula language called "M" to define data transformations. While many transformations can be achieved using the visual interface, users can also directly edit the M code to create more complex and customized transformations.
- 5. Data Loading: Once the data transformation steps are defined, Power Query can load the transformed data into various destinations, such as Excel worksheets, Power BI datasets, or directly into a data model for analysis.
- 6. Refresh and Updates: Power Query allows you to establish connections to data sources and set up scheduled refreshes, ensuring that your data remains up to date with minimal manual intervention.