# Introduction to Power Query

**What is Power Query?**

Power Query is an Excel addin that allows you to import data from various sources, transform and clean the data, and load it into your Excel workbook. It provides a user-friendly interface to perform complex data transformations with just a few clicks.

**Advantages of using Power Query**

- Import data from multiple sources (Excel, CSV, databases, web pages, etc.)
- Clean and transform data (remove errors, split columns, replace values, etc.)
- Automate data refresh process
- Create reusable queries and share them with others

**Getting Started with Power Query**

- Enabling Power Query addin in Excel
- Power Query Editor interface
- Home tab: Import data, combine queries, manage queries
- Transform tab: Apply different transformations
- Add Column tab: Create new columns based on existing data
- View tab: Change layout and visibility of columns

**Importing Data with Power Query**

- Import data from various sources
- Excel files, CSV files, text files
- Databases (SQL Server, Access, Oracle, etc.)
- Web pages, online data sources
- Other sources (XML, JSON, SharePoint lists, etc.)
- Navigating through data preview and headers
- Selecting data to import

**Transforming Data with Power Query - Common data transformation steps**

- Removing columns, rows
- Splitting and merging columns
- Replacing values
- Removing duplicates
- Unpivoting/pivoting data
- Grouping and aggregating data
- Formatting data types

### Using Power Query Editor

- Applied Steps pane
- Creating custom steps
- Combining multiple queries

### Advanced data transformation techniques

- Using formulas and "M" code
- Creating custom functions
- Conditional transformations
- Error handling

### Loading Data to Excel

- Loading data to the current workbook
- Creating a new worksheet
- Refreshing data
- Manual refresh
- Scheduled refresh

### Working with Queries

- Editing existing queries
- Creating new queries from existing ones
- Merging queries
- Managing queries
- Renaming, removing, referencing queries
- Query groups and folders

### Advanced Power Query Topics

- Data mashups and combining data from multiple sources
- Parameters and dynamic data sources
- Power Query advanced editor ("M" code)
- Automating Power Query with VBA and macros
- Using Power Query in Power BI Desktop