**Excel Lecture- 9**

* **Column Operations in Power Query:** 
  + Rename 🡪 Double Click and Reanme
  + Duplicate Column 🡪Right Click Duplicate Column
  + Move 🡪Hold and Drag
* **Transform Text with Extract Options in Power Query:** 
  + Transform 🡪 Text Column 🡪Extract
* **Conditional Options in Power Query:** 
  + Add Columns 🡪 Conditional Columns 🡪Add Conditional Column
* **Columns From Examples in Power Query:**
* **Overview Of Power Query:**
* **Creating if OR / if AND Conditions in power Query:**
* **Overview Of M Code in Power Query: (Data Mashup)**
  + M code, also known as Power Query Formula Language, is a powerful and versatile scripting language used within Microsoft Excel's Power Query feature. It is primarily used for data transformation and preparation tasks, making it an essential tool for data analysts, business intelligence professionals, and Excel users working with large datasets. Here's an overview of M code in Excel:
    - 1. Data Transformation: M code is used to transform and reshape data from various sources (e.g., Excel workbooks, databases, web services) into a structured and usable format. You can clean, filter, merge, and pivot data as needed.
    - 2. Step-by-Step Process: In Power Query, data transformation is performed in a series of steps, and each step corresponds to a piece of M code. You build a query by adding and editing these steps.
    - 3. Function-Based: M code is a functional language, which means it relies on functions to manipulate data. Functions can be used to filter, sort, group, and aggregate data. Power Query provides a wide range of built-in functions, and you can create custom functions as well.
    - 4. Formula Bar: You write M code in the Power Query Editor, which can be accessed by clicking "Edit Queries" on the Data tab of Excel. The M code is written in the formula bar within the Power Query Editor.
    - 5. Custom Functions: You can define your own custom functions in M code to encapsulate specific data transformations or calculations. These functions can then be applied to different datasets.
    - 6. Parameterized Queries: M code allows you to create parameterized queries, which are useful for making dynamic transformations based on user inputs or variables.
    - 7. **Data Mashup**: Power Query enables you to combine and merge data from multiple sources, including text files, databases, web services, and more. M code provides the flexibility to handle complex data integration scenarios.
    - 8. Error Handling: M code includes error handling mechanisms, so you can gracefully handle exceptions and invalid data during the data transformation process.
    - 9. Advanced Transformations: M code can be used for advanced data transformations like unpivoting, transposing, merging, appending, and aggregating data.
    - 10. Power Query Editor: The Power Query Editor provides a user-friendly interface for creating and editing queries, which can be handy for users who are not comfortable with writing code from scratch.
    - 11. Reusability: Once you've created a query with M code, it can be reused on new datasets or refreshed with updated data.
  + M code is a valuable tool for efficiently and effectively preparing and shaping data for analysis in Excel. It allows you to automate data cleaning and transformation tasks, saving you time and reducing the risk of errors in your analyses.