

**1. What is Power Query, and what role does it play in Power BI?**

Power Query is mainly used for ETL(Export,Transform,Load) operations. It is mainly used to get the data, transform the data and export it for informative visualizations. The respective operations can be done in Power Query without writing a single line of code.

**2. How do you connect to different data sources using Power Query?**

In power BI ,there are two options to extract data source from the user,the option is just go to the home and click the get data button from where data from different format can be connected.The second option is “Add data from your report” from which data from some default formats can be connected.

**3. Can you explain the process of data transformation in Power Query?**

Data transformation is the process of cleaning the data to provide meaningful insights from the data to produce a comprehensive report.Data transformation includes removing null values,changing data types,removing duplicate rows,replacing null values using mean,median,mode,removing outliers..

**4. What are some common data transformation operations you can perform in Power Query?**

Data transformation includes removing null values,changing data types,removing duplicate rows,replacing null values using mean,median,mode,removing outliers.These are common issues handled by data transformation process.

**5. How do you handle missing or duplicate data in Power Query?**

To handle missing or duplicate values for numerical columns we can either use mean or median.For handling missing or duplicate values for qualitative data mode can be used(Replacing null with frequently occurring value).

**6. Explain the difference between merging and appending queries in Power Query.**

Merging is mainly used to stack different data table tables by using a common column called primary column which should have distinct values.On the other hand,appending is used to append two data table which has same column name and same data types

**7. What are conditional columns, and how do you create them in Power Query?**

Conditional columns are used for statements which could satisfy a condition or not like “If true then a else b”.We can use condition columns by clicking the “Transform Data” tab and clicking “Add column” where the conditional column tab is available.

**8. Describe the purpose of index columns in Power Query.**

An index column is used to give reference to the data by giving numbers to each column.This index column is mainly used when data table doesn’t have any prior representation of values.We can also add index column to merge two sources.

**9. How can you create a calendar table using Power Query?**

First we need to create a column which has the data in the format of date.Then we can use operations like Year,Month,Quarter etc...

**10. What are some best practices for optimizing data loading and transformation in Power Query?**

For optimizing data loading and transformation,we need to use prior transformation methods for the respective data and also maintain to load the necessary data which is required for the work related errands.These are the techniques which are more effective to implement for load and transformation operations.