

1. What is the purpose of the "Applied Steps" pane in Power Query?

To keep the history of the changes made.

2. How do you remove duplicate rows in Power Query?

In Power Query to remove duplicate rows first, choose a column and click on Home tab / Reduce rows / Remove Rows and then click on Remove Duplicates. Alternatively click on the right side of the mouse on the head of a column and then choose Remove Duplicates.

3. What does the "Filter" icon do in Power Query?

The icon of the filter in Power Query allows including or excluding rows according to a specific value in a column. When you click on this icon it opens a new window with different features for filtering.

4. How would you rename a column from "CustID" to "CustomerID"?

The user can rename a column by double clicking on the column name. Alternatively by clicking the right side of the mouse on column head and choose Rename option.

5. What happens if you click "Close & Apply" in Power Query?

The changes made in Power Query will be applied in Power BI Desktop.

6. Remove all rows where Quantity is less than 2.

First make sure the Quantity column is in number format. Then click on filter to the right of the column name. After in number filters option choose "greater than or equal to" and enter 2.

7. Split the OrderDate column into separate "Year," "Month," and "Day" columns.

Go to Add Column/General/Column and give a column name and use these formulas "Date.Year([OrderDate]), Date.Month([OrderDate]), Date.Day([OrderDate])" for Year,Month and Day columns

8. Replace all "Mouse" entries in the Product column with "Computer Mouse."

Click right side of the mouse in the Product column and click on "Replace Values" and then for Value to find enter "Mouse", and for Replace With enter "Computer Mouse" and click ok

9. Sort the table by OrderDate (newest first).

Click on filter icon to the right of the OrderDate column and choose Sort Descending.

10. How would you handle null values in the Price column?

- ◆ 1. Remove Rows with Null Values

Select the Price column. Go to the Home tab. Click Remove Rows → Remove Blank Rows (or use the filter icon and uncheck (null))

- ◆ 2. Replace Nulls with a Specific Value

Select the Price column. Go to the Transform tab. Click Replace Values → enter: Value To Find: null Replace With: e.g., 0. Alternatively, right-click the column → Replace Values

- ◆ 3. Fill Nulls with Nearby Values

Select the Price column. Go to the Transform tab. Use Fill Down or Fill Up

11. Write custom M-code to add a column calculating TotalSpent = Quantity \* Price.

```
#"Added Custom3" = Table.AddColumn(#"Removed Blank Rows", "TotalSpent", each [Quantity]*[Price])
```

12. Group the table by CustID to show total spending per customer.

```
#"Grouped Rows" = Table.Group(#"Added Custom3", {"CustID"}, {"TotalSpendingPerCust", each List.Sum([TotalSpent]), type number})
```

13. Fix inconsistent date formats (e.g., 01/10/2023 vs. 2023-01-10) in OrderDate.

Select the OrderDate Column. Click on the column containing the inconsistent date formats. Change the Column Type to Date. Go to the Transform tab. Click on Data Type → Select Date.

14. Create a conditional column: Label orders as "High Value" if Price > 100.

```
#"Added Conditional Column" = Table.AddColumn(#"Added Custom3", "High Value", each if [Price] > 100 then "High Value" else null)
```

15. Optimize the query to reduce refresh time (e.g., remove unused columns early).

16. Here is the full M-Code in advanced editor:

```
let
```

```
Source =
```

```
Csv.Document(File.Contents("C:\Users\ITPARK\Documents\power_bi\lesson_3\Orders.txt"),[Delimiter=";", Columns=6, Encoding=1252, QuoteStyle=QuoteStyle.None]),
```

```

#"Promoted Headers" = Table.PromoteHeaders(Source, [PromoteAllScalars=true]),

#"Changed Type" = Table.TransformColumnTypes(#"Promoted Headers",{{"CustID",
Int64.Type}, {"Name", type text}, {"OrderDate", type date}, {"Product", type text}, {"Quantity",
Int64.Type}, {"Price", Int64.Type}}),

#"Added Custom" = Table.AddColumn(#"Changed Type", "Year", each
Date.Year([OrderDate])),

#"Added Custom1" = Table.AddColumn(#"Added Custom", "Month", each
Date.Month([OrderDate])),

#"Added Custom2" = Table.AddColumn(#"Added Custom1", "Day", each
Date.Day([OrderDate])),

#"Replaced Value" = Table.ReplaceValue(#"Added Custom2","Mouse","Computer
Mouse",Replacer.ReplaceText,{"Product"}),

#"Sorted Rows" = Table.Sort(#"Replaced Value",{{"OrderDate", Order.Descending}}),

#"Removed Blank Rows" = Table.SelectRows(#"Sorted Rows", each not
List.IsEmpty(List.RemoveMatchingItems(Record.FieldValues(_), {"", null}))),

#"Added Custom3" = Table.AddColumn(#"Removed Blank Rows", "TotalSpent", each
[Quantity]*[Price]),

#"Added Conditional Column" = Table.AddColumn(#"Added Custom3", "High Value",
each if [Price] > 100 then "High Value" else null),

#"Grouped Rows" = Table.Group(#"Added Conditional Column", {"CustID"},
{{"TotalSpendingPerCust", each List.Sum([TotalSpent]), type number}})

in

#"Grouped Rows"

```