POWER QUERY RECIPES

Master Your Data in Excel & Power Bl







About Power Query Recipes

These cards are a set of ready-to-use Power Query Recipes to lead you step-by-step through a variety of data transformations and techniques. These cards are a useful reference where you can look up the exact steps needed for a particular data transformation pattern. We hope you find them as handy as we do ourselves!

Using the Recipe Cards

The Table of Contents and the recipe cards are fully linked so you can easily navigate between them. Clicking on the recipe number or name on the Table of Contents will take you directly to that recipe. Likewise, if a recipe card references another recipe, clicking that reference will take you directly to the referenced recipe.

Many of the recipes are also linked to corresponding videos in one or more of our Skillwave Training courses, and are indicated with the video icons shown here:





Dimensional Modeling for the Excel Pro



Dimensional Modeling for the Power BI Pro

If you are enrolled in the corresponding course(s) indicated on the recipe card, clicking the video icon will take you to that video on the course site. Please note that you will first need to login to the course site before being able to watch the video. You will not be able to watch the video if you are not enrolled in the corresponding course.

If you are on the ongoing subscription of these cards, we will let you know when new cards have been added to the set you so can download your updated copy.







Look for the

Difficulty Scale:

Pattern

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Course for Corresponding Video:

00. BEST PRACTICE ARCHITECTURES

0.100.1902	Files as a Data Source
0.110.2010	Creating a Staging Query
0.120.2010	Modifying Query Load Destinations
0.410.2010	Creating Fact Tables
0.510.2010	Creating Dimension Tables
0.520.2010	Creating Bridge Tables
0.530.2010	Creating Composite Keys
0.540.2010	Flattening Snowflaked Dimensions

10. SPLITTING DATA

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10.105.1910	Split Records into Rows

20. RESHAPING DATA

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20.105.1910	Unpivoting Data
20.106.1906	Keep nulls During Unpivot
20.107.1910	Prevent Errors During Unpivot
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20.116.1910	Unpivot Subcategories – Big Data
20.120.1910	Pivoting Stacked Data
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30. COMBINING DATA

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	30.105.2103	Exact Match
	30.110.2103	Left Outer Join
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	30.112.2103	Full Outer Join
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	30.120.2103	Cartesian Product (Many to Many Join)
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Difficulty Scale

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30. COMBINING DATA CONT...

- 30.125.1910 Approximate Match
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40. CONDITIONAL LOGIC

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Code

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Course for Corresponding Video:

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- 50.125.2010 Number Grouped Rows

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Look for the Pattern Difficulty Scale:

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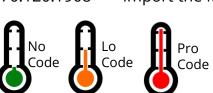
Course for Corresponding Video:

60. DATE & TIN	IE TECHNIQUES CONTINUED
60.210.2010	Dynamic Calendar: Start Date to End Date
60.220.2004	Dynamic Calendar: Start Date + x Days
60.330.2010	Fiscal Periods for 12-Month Non-Standard Year Ends
60.410.2010	PeriodID Column Recipes for 364-Day Calendars
60.420.2010	MonthID Column Recipe for 364-Day Calendars
60.430.2010	Fiscal Period Columns for 445/454/544 Calendars
60.510.2010	PeriodID Column Formulae for 13 x 4-Week Calendars
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60.800.2010	Replace null with Current Date
60.900.1903	Convert a Unix Timestamp to a Valid Date
60.910.1903	Convert UTC DateTime to Local DateTime
60.920.1903	Switching DateTimes Zones

70. MISCELLANEOUS

70.100.2001	Add a Random Number to all Table Rows
70.110.1908	Difference from Prior Row
70.120.1908	Import the Most Recent File in a Folder

Look for the Pattern Difficulty Scale:



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Power Query Academy	Dimensional Modeling	
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Sample Recipes

Get the full set of Power Query Recipes at: https://skillwave.training/shop





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Source Table

Transactions 2/28/2017 HOLIDAY INN VANCOUVER CENVANCOUVER BC 158.14 2/28/2017 BCF-RBI-ONLINE BOOKING VICTORIA BC 18.5 2/27/2017

BCF-HORSESHOE BAY VICTORIA BC 105.65

2/25/2017 WESTIN GRAND HOTEL VANCOUVER BC 117

2/23/2017 ORIGINAL JOES RESTAURANT VANCOUVER BC 57.96

2/22/2017 JOEY BENTALL ONE VANCOUVER BC 185.93

			· · · · ·	
	A ^B _C Transactions	1.2	Index	
1	2/28/2017			
2	HOLIDAY INN VANCOUVER CENVAN			
3	158.14			
4				
5	2/28/2017			
6	BCF-RBI-ONLINE BOOKING VICTO			
7	18			
8				
9	2/27/2017			
10	BCF-HORSESHOE BAY VICTORIA BC			*
11	105.65			
12				
4.0	2/25/2017			

Pivoting Stacked Data Recipe

Add a columns for transaction and line IDs
Add Column → Index Column → From 0
Select [Index] → Add Column → Standard → Integer-Divide*
Select [Index] → Transform → Standard → Modulo*

Pivot the data

Select **[Index]** \rightarrow Transform \rightarrow Pivot Column

Set the Values field to your data column

Go Advanced and "Don't Aggregate"

Right click the **[Integer-Divide]** column → Remove

Rename the newly created columns

Set your data types

Modulo and Integer Divide always target the number representing the 1st row of the 2nd transaction



Output Table

Date	Vendor	Amount
Tuesday, February 28, 2017	HOLIDAY INN VANCOUVER CENVANCOUVER BC	\$158.14
Tuesday, February 28, 2017	BCF-RBI-ONLINE BOOKING VICTORIA BC	\$18.5
Monday, February 27, 2017	BCF-HORSESHOE BAY VICTORIA BC	\$105.65
Saturday, February 25, 2017	WESTIN GRAND HOTEL VANCOUVER BC	\$117
Thursday, February 23, 2017	ORIGINAL JOES RESTAURANT VANCOUVER BC	\$57.96
Wednesday, February 22, 2017	JOEY BENTALL ONE VANCOUVER BC	\$185.93
Tuesday, February 21, 2017	SUTTON PLACE HOTEL VAN VANCOUVER BC	\$458.96
Monday, February 20, 2017	SPICY 6 FINE INDIAN CUISIVANCOUVER BC	\$27.72
Monday, February 20, 2017	BCF-RBI-ONLINE BOOKING VICTORIA BC	\$33.5
Monday, February 20, 2017	BCF- NANAIMO VICTORIA BC	\$71.75
Monday, February 20, 2017	"BCF-COWICHAN, QUEEN VICTORIA BC "	\$11.64
Tuesday, February 14, 2017	BCF-HORSESHOE BAY VICTORIA BC	\$88.7
Friday, February 10, 2017	SUTTON PLACE HOTEL VAN VANCOUVER BC	\$9.71
Friday, February 10, 2017	SUTTON PLACE HOTEL VAN VANCOUVER BC	\$233.16
Friday, February 10, 2017	BCF- NANAIMO VICTORIA BC	\$88.7

Power Query Academy Subscribers: Click here to see this recipe in action!

For more data patterns check out our courses at: © www.skillwave.training







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Source Table				
Order ID	-	Quantity	•	
TX000987			75	
TX000988		2,7	55	
TX000989		5,9	19	
TX000990		1,0	00	
TX000991		14,1	69	
Key		Match		
Match		Return		
Quantity		Price Per	-	
	1	5	.95	
	250	5	.85	
1	.000	5	.75	
	.000 .500		.75 .65	
2		5		
2	500	5	.65	

Approximate Match Recipe
Prepare <mark>Source</mark> table Set data types
Prepare Lookup table Rename [Match] column to match Source table Set data types
Perform the match Reference the Source table Go to Home \rightarrow Append \rightarrow Lookup table Filter the [Match] column \rightarrow Sort Ascending Filter the [Key] column \rightarrow Sort Ascending Right click the [Return] column \rightarrow Fill \rightarrow Down Filter the [Key] column \rightarrow uncheck <i>null</i>



	Output Table				
	Order ID 💌	Quantity 💌	Price Per 💌		
	TX000987	75	5.95		
	TX000990	1000	5.75		
	TX000988	2755	5.65		
7	TX000989	5919	5.55		
	TX000992	10670	5.45		
	TX000991	14169	5.45		
	Key	Match	Return		



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For more data patterns check out our courses at: © www.skillwave.training **Recipe:** 30.125.1910



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