

How do you perform an inner join in Excel?

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An inner join in Excel is a method used to combine two or more tables based on matching values in a specified column. To perform an inner join, first open the Excel spreadsheet containing the tables to be joined. Then, select the "Data" tab and click on the "From Table/Range" option. Next, highlight both tables and click on the "Merge Queries" button. Select the columns to be joined and choose "Inner" as the join type. Finally, click "OK" to perform the inner join and create a new table with the combined data. This process allows for the merging of related data from different tables, providing a comprehensive view of the information.

Perform an Inner Join in Excel (With Example)

An inner join allows you to join together two tables in which the only rows in the resulting table are the ones where there are matching values in a column common to both tables.

The following step-by-step example shows how to use the Power Query functionality in Excel to perform an inner join on two tables.

Step 1: Enter the Values for Each Table

First, let's enter the following values for two tables in Excel:

	A	B	C	D	E	F
1	team	points		team	rebounds	
2	Mavericks	22		Mavericks	4	
3	Spurs	29		Hornets	7	
4	Rockets	34		Kings	7	
5	Nets	30		Wizards	12	
6	Hornets	17		Celtics	10	
7	Blazers	15				
8	Kings	14				
9						
10						
11						
12						
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17						
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19						

We will perform an inner join in which we only keep the rows from each table that have matching values in the Team column.

Step 2: Convert Each Range to a Table

Next, we must convert each range of values into a table.

First, highlight the cell range A1:B8 and then click the Insert tab along the top ribbon and then click the Table icon:

The screenshot shows the Excel ribbon with the 'Insert' tab selected. The 'Table' button is highlighted with a red box. Below the ribbon, the following data is visible in the spreadsheet:

	A	B	C	D	E	F
1	team	points		team	rebounds	
2	Mavericks	22		Mavericks	4	
3	Spurs	29		Hornets	7	
4	Rockets	34		Kings	7	
5	Nets	30		Wizards	12	
6	Hornets	17		Celtics	10	
7	Blazers	15				
8	Kings	14				
9						
10						
11						
12						
13						

In the new window that pops up, click the OK button.

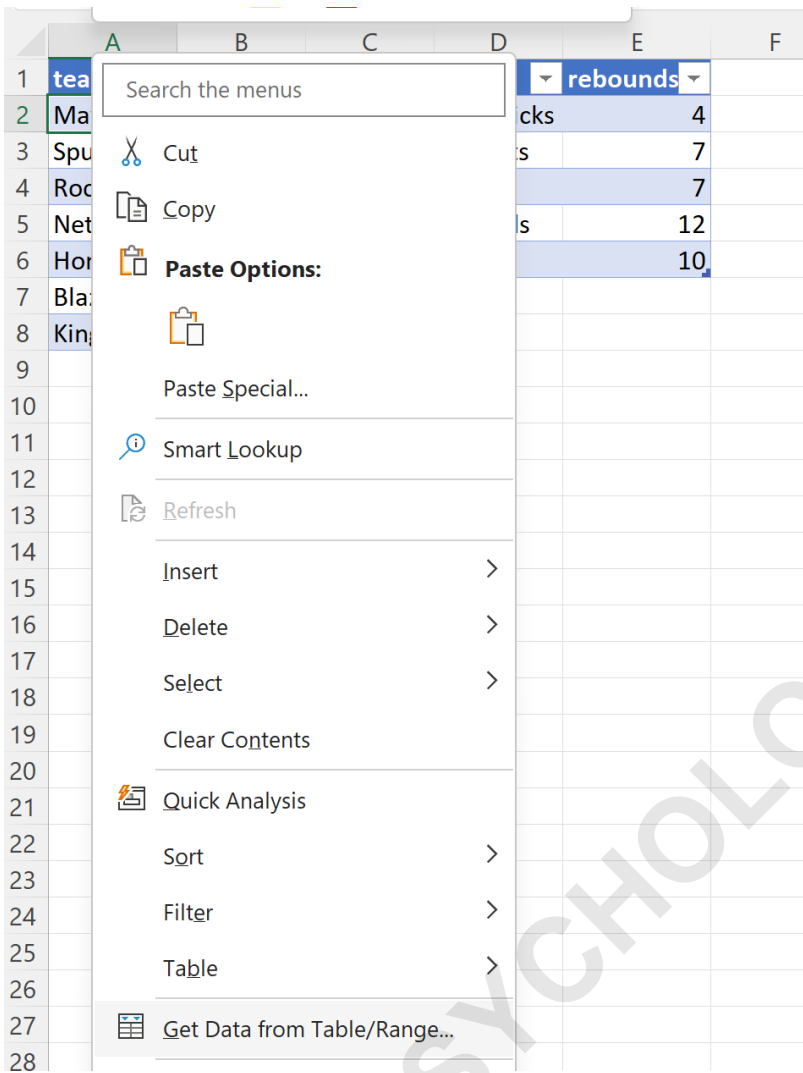
Repeat these steps for the cell range D1:E6.

Both ranges of data will now appear as tables:

	A	B	C	D	E	F
1	team ▼	points ▼		team ▼	rebounds ▼	
2	Mavericks	22		Mavericks	4	
3	Spurs	29		Hornets	7	
4	Rockets	34		Kings	7	
5	Nets	30		Wizards	12	
6	Hornets	17		Celtics	10	
7	Blazers	15				
8	Kings	14				
9						
10						
11						
12						
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16						
17						
18						

Step 3: Use Power Query to Perform Inner Join

Next, right click any cell in the first table and then click Get Data from Table/Range from the dropdown menu:



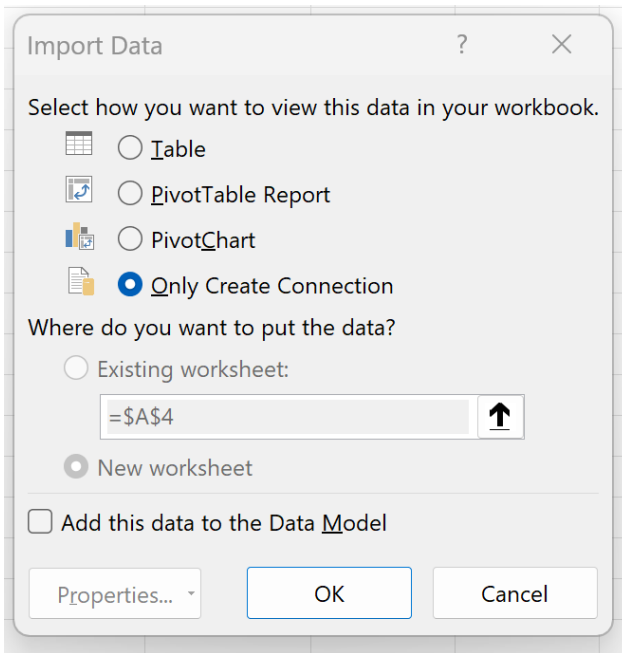
Next, simply click the Close & Load icon in the top left corner and then click Close & Load To from the dropdown menu:

Save your changes to this query, close the Query Editor window, and specify where to load the results.

	A ^B C team	1 ² 3 points
1	Mavericks	22
2	Spurs	29
3	Rockets	34
4	Nets	30
5	Hornets	17
6	Blazers	15
7	Kings	14

= Table.TransformColumnTypes(Source,{{"tea

In the new window that appears, select Only Create Connection and then click OK:

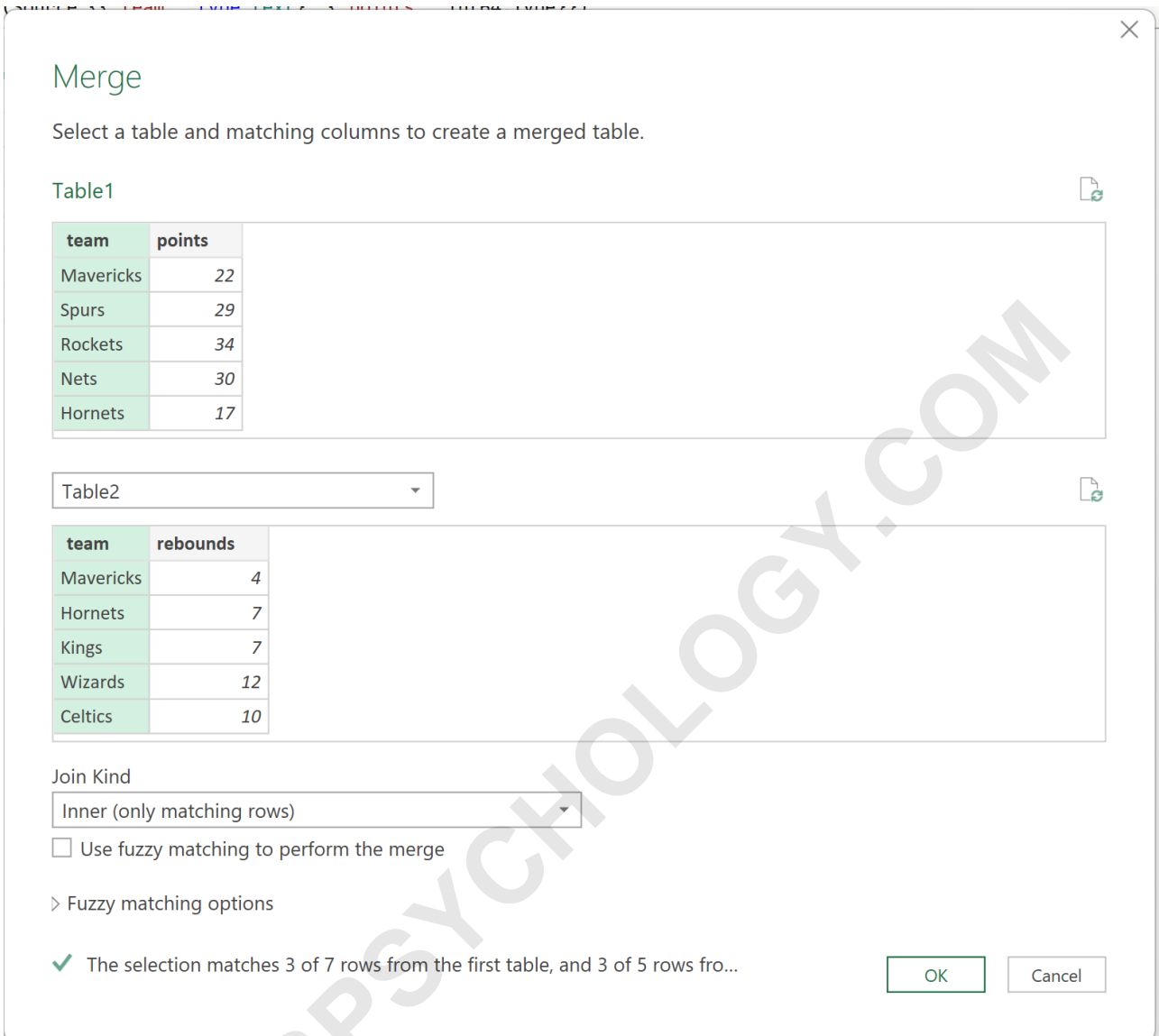


Next, right click any cell in the second table and then click Get Data from Table/Range from the dropdown menu:

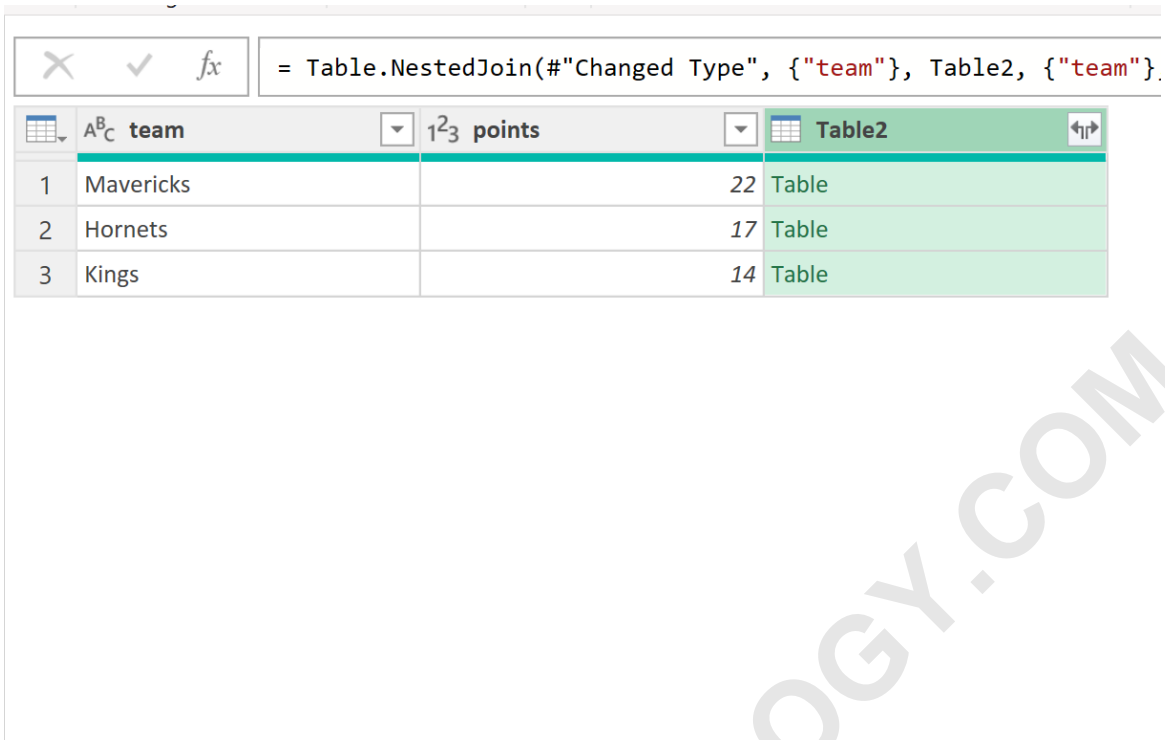
The second table will be loaded into the Power Query Editor.

Next, click the Merge Queries icon in the Combine group along the top ribbon of the Power Query Editor.

In the new window that appears, place the Table1 in the first box and Table2 in the second box. Then click the team column in each table. Then click Inner under the Join Kind dropdown menu, then click OK:



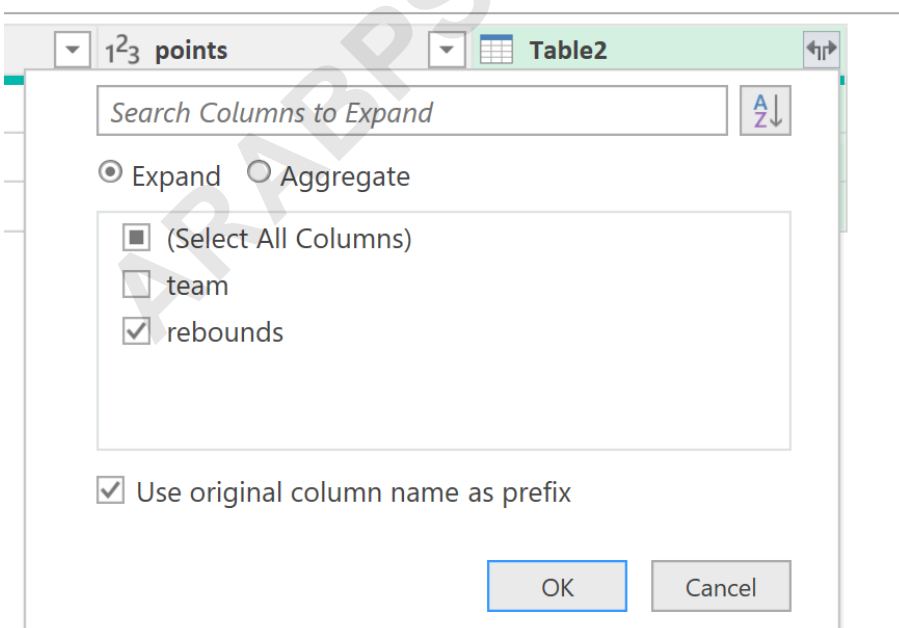
Once you click OK, the inner join will be performed:



The image shows an Excel formula bar with the formula `= Table.NestedJoin("#Changed Type", {"team"}, Table2, {"team"}).` Below the formula bar is a table with three columns: 'team', 'points', and 'Table2'. The 'team' column contains 'Mavericks', 'Hornets', and 'Kings'. The 'points' column contains '22', '17', and '14'. The 'Table2' column contains 'Table', 'Table', and 'Table'.

	team	points	Table2
1	Mavericks	22	Table
2	Hornets	17	Table
3	Kings	14	Table

Next, click the left and right arrow icons on the column titled Table2 and then click OK:

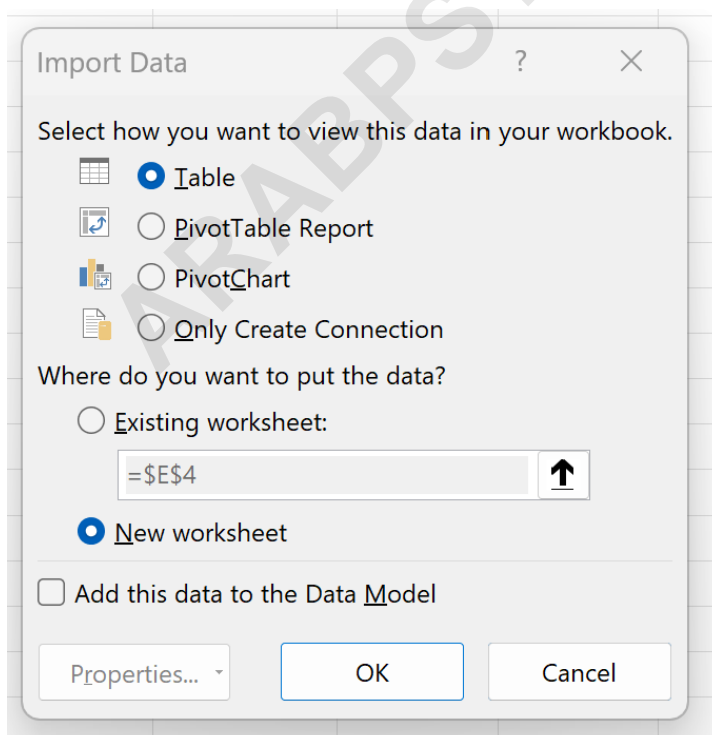


The rebounds column from the second table will appear:

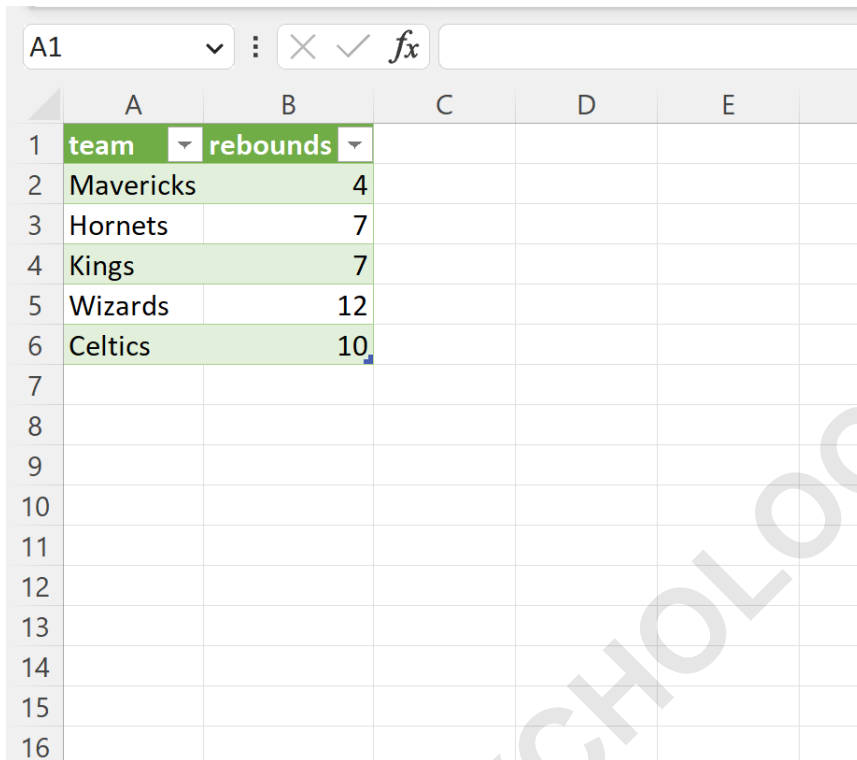
	A ^B C team	1 ² 3 points	1 ² 3 rebounds
1	Mavericks	22	4
2	Hornets	17	7
3	Kings	14	7

Lastly, click the Close and Load To icon once more.

In the new window that appears, click Table and New worksheet, then click OK:



The final table that resulted from the inner join will now be displayed in a new worksheet:



	A	B	C	D	E
1	team	rebounds			
2	Mavericks	4			
3	Hornets	7			
4	Kings	7			
5	Wizards	12			
6	Celtics	10			
7					
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Notice that only the rows with the team names that appear in both tables are in the final table.

The following tutorials explain how to perform other common tasks in Excel: