Pivot Tables

Pivot tables are one of **Excel**'s most powerful features. A pivot table allows you to extract the significance from a large, detailed data set.

Our data set consists of 214 rows and 6 fields. Order ID, Product, Category, Amount, Date and Country.



Insert a Pivot Table

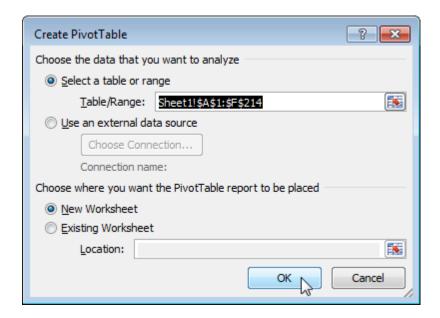
To insert a **pivot table**, execute the following steps.

- 1. Click any single cell inside the data set.
- 2. On the Insert tab, click PivotTable.



The following dialog box appears. Excel automatically selects the data for you. The default location for a new pivot table is New Worksheet.

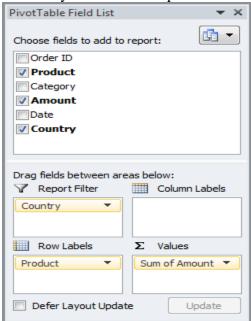
3. Click OK.



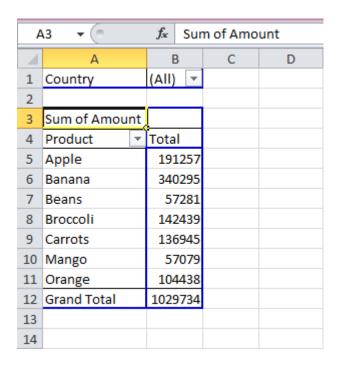
Drag fields

The **PivotTable field list** appears. To get the total amount exported of each product, drag the following fields to the different areas.

- 1. Product Field to the Row Labels area.
- 2. Amount Field to the Values area.
- 3. Country Field to the Report Filter area.



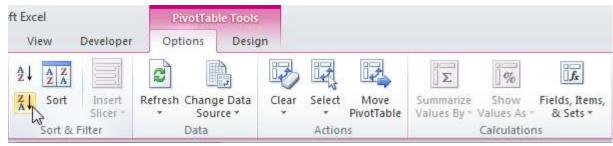
Below you can find the pivot table. Bananas are our main export product. That's how easy pivot tables can be!



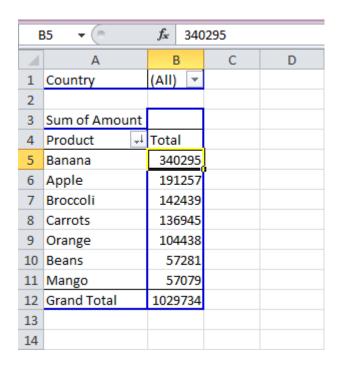
Sort

To get Banana at the top of the list, sort the pivot table.

- 1. Click any cell inside the Total column.
- 2. The PivotTable Tools contextual tab activates. On the Options tab, click the Sort Largest to Smallest button (ZA).



Result.



Filter

Because we added the Country field to the Report Filter area, we can filter this pivot table by Country. For example, which products do we export the most to France?

1. Click the filter drop-down and select France.

Result. Apples are our main export product to France.

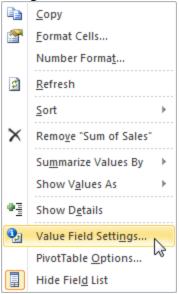
E	35 ▼ (*)	<i>f</i> _∗ 8019	3	
1	Α	В	С	D
1	Country	France 🗐		
2		l	n,	
3	Sum of Amount			
4	Product 🚚	Total		
5	Apple	80193		
6	Banana	36094		
7	Carrots	9104		
8	Mango	7388		
9	Broccoli	5341		
10	Orange	2256		
11	Beans	680		
12	Grand Total	141056		
13				
14				

Note: you can use the standard filter (triangle next to Product) to only show the totals of specific products.

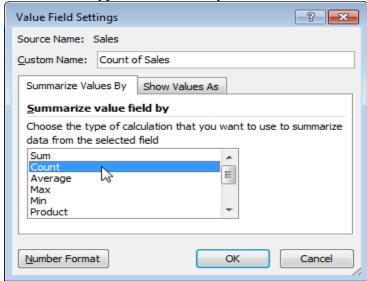
Change Summary Calculation

By default, Excel summarizes your data by either summing or counting the items. To change the type of calculation that you want to use, execute the following steps.

- 1. Click any cell inside the Total column.
- 2. Right click and click on Value Field Settings...

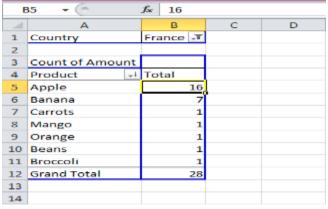


3. Choose the type of calculation you want to use. For example, click Count.



4. Click OK.

Result. 16 out of the 28 orders to France were 'Apple' orders.



Two-dimensional Pivot Table

If you drag a field to the Row Labels area and Column Labels area, you can create a two-dimensional pivot table. For example, to get the total amount exported to each country, of each product, drag the following fields to the different areas.

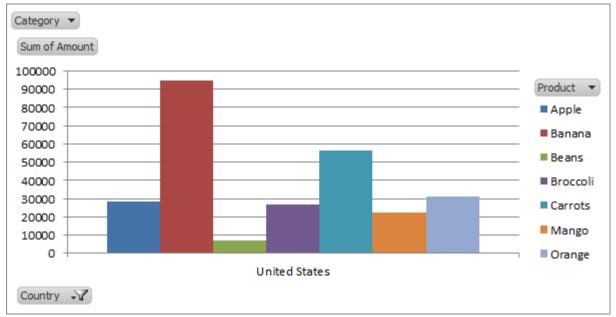
- 1. Country Field to the Row Labels area.
- 2. Product Field to the Column Labels area.
- 3. Amount Field to the Values area.
- 4. Category Field to the Report Filter area.



Below you can find the two-dimensional pivot table.

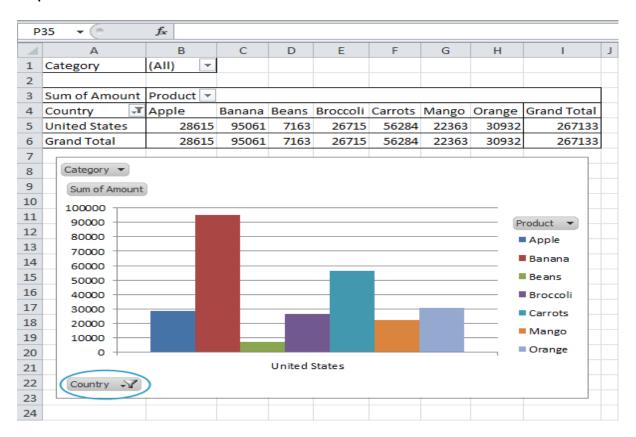
A3 ▼ Sum of Amount										
	А	В	С	D	Е	F	G	Н	I	J
1	Category	(AII)								
2										
3	Sum of Amount	Product 💌								
4	Country	Apple	Banana	Beans	Broccoli	Carrots	Mango	Orange	Grand Total	
5	Australia	20634	52721	14433	17953	8106	9186	8680	131713	
6	Canada	24867	33775		12407		3767	19929	94745	
7	France	80193	36094	680	5341	9104	7388	2256	141056	
8	Germany	9082	39686	29905	37197	21636	8775	8887	155168	
9	New Zealand	10332	40050		4390			12010	66782	
10	United Kingdom	17534	42908	5100	38436	41815	5600	21744	173137	
11	United States	28615	95061	7163	26715	56284	22363	30932	267133	
12	Grand Total	191257	340295	57281	142439	136945	57079	104438	1029734	
13										
14										

To easily compare these numbers, create a <u>pivot chart</u> and apply a filter. Maybe this is one step too far for you at this stage, but it shows you one of the many other powerful pivot table features Excel has to offer.



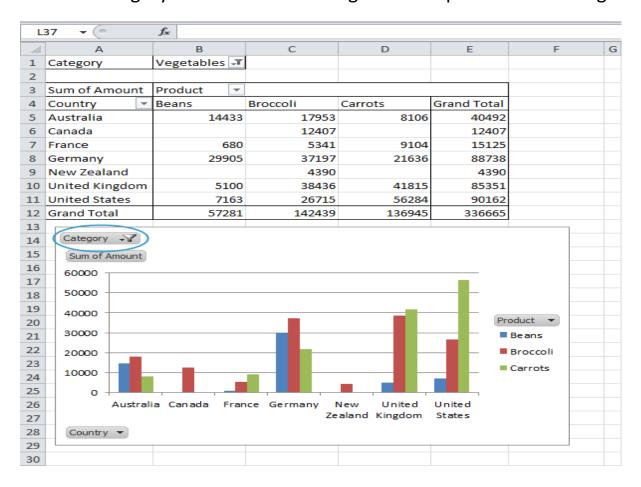
Q1)

Use the Region filter to show the total amount of each product exported to United States.



Use the Category filter to show the vegetables exported to each region.

Q2)

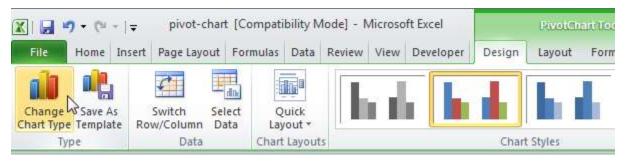


Q3)

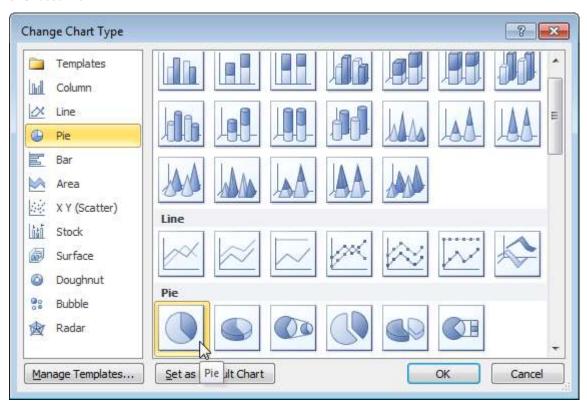
Change Pivot Chart Type

You can change to a different type of pivot chart at any time.

- 1. Select the chart.
- 2. The PivotChart tools contextual tab activates. On the Design tab, click Change Chart Type.



3. Choose Pie.



4. Click OK.

Note: pie charts always use one data series (in this case, Apple). To get a pivot chart of a country, swap the data over the axis. Select the chart.

The PivotChart tools contextual tab activates. On the Design tab, click Switch Row/Column.

