

**Pivot Table:** a data summarization tool found in data visualization programs. A pivot table allows you to extract the significance from a large, detailed data set.

ID	Product	Month	Region	Revenue
d01n	Darjeeling Tea	January	North	\$43,234
o01e	Oolong Tea	January	East	\$24,140
o01w	Oolong Tea	January	West	\$24,164
o01s	Oolong Tea	January	South	\$28,371
d01s	Darjeeling Tea	January	South	\$43,018
e01s	Earl Grey Tea	January	South	\$49,713
e01e	Earl Grey Tea	January	East	\$50,074
e01n	Earl Grey Tea	January	North	\$54,345
o02e	Oolong Tea	February	East	\$26,287
d02w	Darjeeling Tea	February	West	\$42,347
d02e	Darjeeling Tea	February	East	\$45,805
e02e	Earl Grey Tea	February	East	\$53,007
e02s	Earl Grey Tea	February	South	\$54,629
o03s	Oolong Tea	March	South	\$24,376
o03w	Oolong Tea	March	West	\$24,813
d03n	Darjeeling Tea	March	North	\$37,103
d03w	Darjeeling Tea	March	West	\$40,691
d03s	Darjeeling Tea	March	South	\$45,044
d03e	Darjeeling Tea	March	East	\$45,359
e03e	Earl Grey Tea	March	East	\$51,096
o04n	Oolong Tea	April	North	\$36,770
e05w	Earl Grey Tea	May	West	\$50,092
o06n	Oolong Tea	June	North	\$39,246
e06s	Earl Grey Tea	June	South	\$54,716

To create a pivot table, first, select all the data you want to analyze, and then click Data → Pivot Table. If you cannot find pivot table under “Data” menu, try to find it in “Tables”.

Sum of Revenue	Column Labels	January	February	March	April	May	June	Grand Total
Darjeeling Tea		86252	88152	168197				342601
Earl Grey Tea		154132	107636	51096		50092	54716	417672
Oolong Tea		76675	26287	49189	36770		39246	228167
<b>Grand Total</b>		<b>317059</b>	<b>222075</b>	<b>268482</b>	<b>36770</b>	<b>50092</b>	<b>93962</b>	<b>988440</b>

Then the pivot table will be created in a new separate sheet. By making “Product” to be the row label, “Month” to be the column label and “Sum of Revenue” to be the value, we get the pivot table shown on the left. If you want to change the value to be count, average or any other statistics, you can click the little “i” to change to whatever you want.



# TA Lecture Notes

April 8, 2015

The screenshot shows an Excel spreadsheet with a PivotTable. The PivotTable has 'Report Filter' set to 'Month' and 'Column Labels' set to 'Product'. The 'Values' area is set to 'Average of Revenue'. The 'PivotTable Field' task pane shows 'Source field: Revenue' and 'Summarize by: Average'. The 'PivotTable Builder' task pane shows 'Report Filter' set to 'Month' and 'Values' set to 'Average of Revenue'.

e05w	Earl Grey Tea	May	West	\$50,092
e06n	Oolong Tea	June	North	\$39,246
e06s	Earl Grey Tea	June	South	\$54,716
120061.6667 =SUM(Pivot!B5:B7)				

Similarly, you can also create a pivot table for lecture sheet 2.

The screenshot shows an Excel spreadsheet with a PivotTable. The PivotTable has 'Report Filter' set to 'Date' and 'Column Labels' set to 'Country Name'. The 'Values' area is set to 'Sum of Population: Total (count)'. The 'PivotTable Field' task pane shows 'Source field: Population: Total (count)' and 'Summarize by: Sum'. The 'PivotTable Builder' task pane shows 'Report Filter' set to 'Date' and 'Values' set to 'Sum of Population: Total (count)'.



## TA Lecture Notes

April 8, 2015

<b>Q7: What was the population in 2000?</b>		
Country #1:	30533827	=SUMIFS('Data by country'!J:J,'Data by country'!A:A,Overview!C11,'Data by country'!B:B,"7/1/00")
Country #2:	56942108	
<b>Q8: What was the population in 2010?</b>		
Country #1:	35468208	=SUMIFS('Data by country'!J:J,'Data by country'!A:A,Overview!C6,'Data by country'!B:B,"7/1/10")
Country #2:	60483385	
<b>Q9: As a percentage, what was the growth in population from 2000 to 2010?</b>		
Country #1:	16%	=(C33-C29)/C29
Country #2:	6%	
<b>Q10: Which country had the larger population growth percentage?</b>		
Answer:	Algeria	=IF(C37>=C38,C6,C7)