



Data Analysis: A Practical Introduction for Absolute Beginners

Final Challenge Lab

Overview

In the mighty Kingdom of Atlantis, you're a data analyst who's been hired by the Queen to look at trends in housing sales among different cities. Using this data, you'll answer a series of questions comparing various variables in the realm's housing market.

In this challenge lab, you won't be provided with the same step-by-step instructions as the previous labs (that's where the "challenge" part comes in). Good luck!

Data Set

ChallengeLab.csv

What You'll Need

To complete the lab, you will need the online version of Microsoft Excel.

Exercise 1: Housing Challenge

Open the data set in Excel, which lists 46 different cities in the Kingdom of Atlantis. The columns/variables represent the following:

city = the name of the city

sales = the number of home sales for that city

volume = the total value of sales for that city, in Atlantean dollars

median = the median home price for that city, in Atlantean dollars

listings = the total number of active listings in that city

inventory = the estimated amount of time to sell off the current inventory in that city, in weeks

Note: When you've pasted the data into a new Excel Online spreadsheet, if you see any cells that appear to be filled with a series of pound signs (#####), you might need to expand that particular column. To do this, simply drag the edge of the column header to make it wider until the actual data values appear.

With the data set open, answer the following questions. Enter your answers in the "Lab Check" quiz section following this lab. These questions are graded, so take your time and answer them carefully. Feel free to perform calculations with the data in Excel however you wish to come up with your answers.

1. Which city has the most sales?
2. What is the mean/average number of listings across all cities?
3. What is the correlation coefficient between number of sales and inventory?
4. What is the relationship between number of sales and median home price?
5. What is the relationship between listings and inventory?

Head to the “Lab Check” section of this lesson to enter your answers.