Up and running from spreadsheets to Python: demo notes

File: from-spreadsheets-to-python.xlsx

Worksheet: exhibit-a

Here we have an example where the sum of 1 through 5 is taken in cell B7. We then take the square root of B7 in B8, and multiply B8 by 2 in cell B9.

If we make any changes to the range B2-B6, *everything* downstream changes; it’s a “spaghetti web” of references. Many times in analysis, we would like to hold things in memory and use them later. This is difficult in base Excel.

Worksheet: exhibit-b

Here we have a weekly sales report for which we would like to calculate summary statistics by order such as the mean and median.

While PivotTables make a great interactive report, it can be a pain to drag and drop every field. Moreover, not all statistics may be available off-the-shelf with a PivotTable (such as the median).

In these cases, Excel is showing some limitations for

1. Working with static values, and
2. Repeatable statistical analysis.