This will be project 2 redone for Geo-med this time with transformations to data in python.

First, we start out with the package to used which is Pandas, this package works best and efficiently in python for interpreting and manipulating spreadsheets(given they are in the environment which I already completed).

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The print statement is the same I was using in R where it is just printing the first few rows as they are needed for confirmation of correct data. I am certain the full sheet loads. In this case I am loading them into python as a data frame as it is the best for these sorts of sets of data.

Next as I did with the excel, I want to gain as much insight from the original sheet before merge. So, profit margin is calculated in the cost sheet.



This gives us the same sheet that was created in the excel as it adds the column of Profit\_Margin to the cost data.

Next is then for the merge where the column of Cost had to be renamed as it was “Item Number” instead of “Item No”. this was done simply with.

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After the quick transformations this is now the Cost sheet data.

With it now ready to be merged that is what I do with the data in the code.

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This is the merged data we know it has merged correctly because the code is strong, and it exactly matches the data frame in excel when sorted by Item No.

Next was tackling the anti-join to see what wasn’t transferred over or used in the merging of the sales data and cost sheets.

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This gives us the data frame of Products by item number that are not on the sales sheet.

We still need to look at profitability based off Profit margin of each product which I decided to do after the merge because it is much easier.

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Once again using head even though this data frame is the smallest, so it is all there, but I am not showing it all. This gets us the products with negative profit margin at MSRP.

Naturally next is compute the unit price each is being sold at in the sales data or Sls which has become merge\_CS for me.

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Same as earlier this gives us the extra column on the end but this time it calculates the unit price on each sale.

Then I created the same unprofitable table of products that are currently being sold at a unit price lower than the Cost.

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It does contain duplicates, but it also shows the varying prices for each so if there is a difference in price with the varying unit prices that occur on the sheet. Once again it is only the head but the whole set is there.

Lastly are average sales per item no in the sales merged sheet. This is exactly what I did in the excel also.

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This gives the average sale price by Item No, then for clarity sake I decided to replace the name of the unit price column with average unit price as it was more clear that way.

This is the end and all the work I did to mirror and show skills.

Thank you for this opportunity and I hope this is satisfactory,

Sean Dudley