**A picture containing text

Description automatically generatedPython Workshop**

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Imagine you are a business analyst at Cycle Sales, a small business in New York City selling bike equipment. The manager asked you to analyze the Transactions worksheet from 2017. He is interested in the following:

1. What was the most popular brand in 2017, in other words, which product line had the highest number in sales?  
   Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Which brand was most profitable? Hint: Standard Cost- List Price= Profit  
   Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Which month was most profitable?  
   Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Now it’s your turn! ☺

After you analyzed the Transactions worksheet, he also wants to learn more about the current customers. He wants to know the following:

1. Which age group has purchased most items based on the 2017 Transactions?  
   Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Which gender bought more? Male/ Female?  
   Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. **Challenge**: Create a double bar graph to analyze the number of customers based on gender and job industry category.  
   Hint 1: Don’t include ‘undefined’ gender and remove the missing values.  
   Hint 2: Use conditional statements!   
   Hint 3: Use the following link for visualization.   
   <https://matplotlib.org/3.1.1/gallery/lines_bars_and_markers/barchart.html>

To help your manager better understand your findings, include graphs as needed!

Additional Resources: <https://matplotlib.org/3.1.0/gallery/color/named_colors.html>

**Good luck! ☺**