**Executive Summary**

Natasha's goal is to increase profits by 10%. One way that we found she is making the best profits is by looking at her segments of where profit is being generated. We present our analysis of Office Solutions with inquisitions about some underperforming segments.

- We divided the data and sorted it using Pandas in Colab, showing a clearer picture of how to achieve the goal using data analytics in charts and tables.

- The first segment was "Consumer." The consumer segment is represented in our blue tile, reaching up to the 130k range. From the image provided, it demonstrates that the blue segment, the consumer segment, brought the highest profit margin to the company.

- The next segment was "Corporate", which is the middle green tile section provided in the given graphical representation. The corporate segment lies just under consumers by a good margin, ranging at about 90k profit.

- The last segment, "Home Office," is the red tile and our smallest tile in profit. This one is also a gap margin behind the green tile by 30k, which is the corporate area, and the blue tower, which is the consumer home office, lands at the bottom, sitting at about 60k profit.

- **Issue Concerning the Discount**
  - At first, discounting may seem like a good strategy to increase sales, but our data suggests that excessive discounting is hurting overall profits.
  - Relevance to Natasha's Goal: Natasha wants to increase profits by 10%, but if she relies on discounts to drive sales, her actual profit margins shrink, making it harder to reach her goal.

- Higher Discounts Lead to Lower Profit.

    - At a 0% discount, Natasha makes $320K+ in profit.

    - At a 50-70% discount, Natasha loses profit instead of gaining it.

- **Discounting is NOT a sustainable strategy to increase profit.**

    - It boosts sales temporarily but cuts profit margins too much.

    - Too many discounts lead to financial losses, not the 10% profit increase Natasha wants.

Impact of Discount on Profit

Profit by Segment
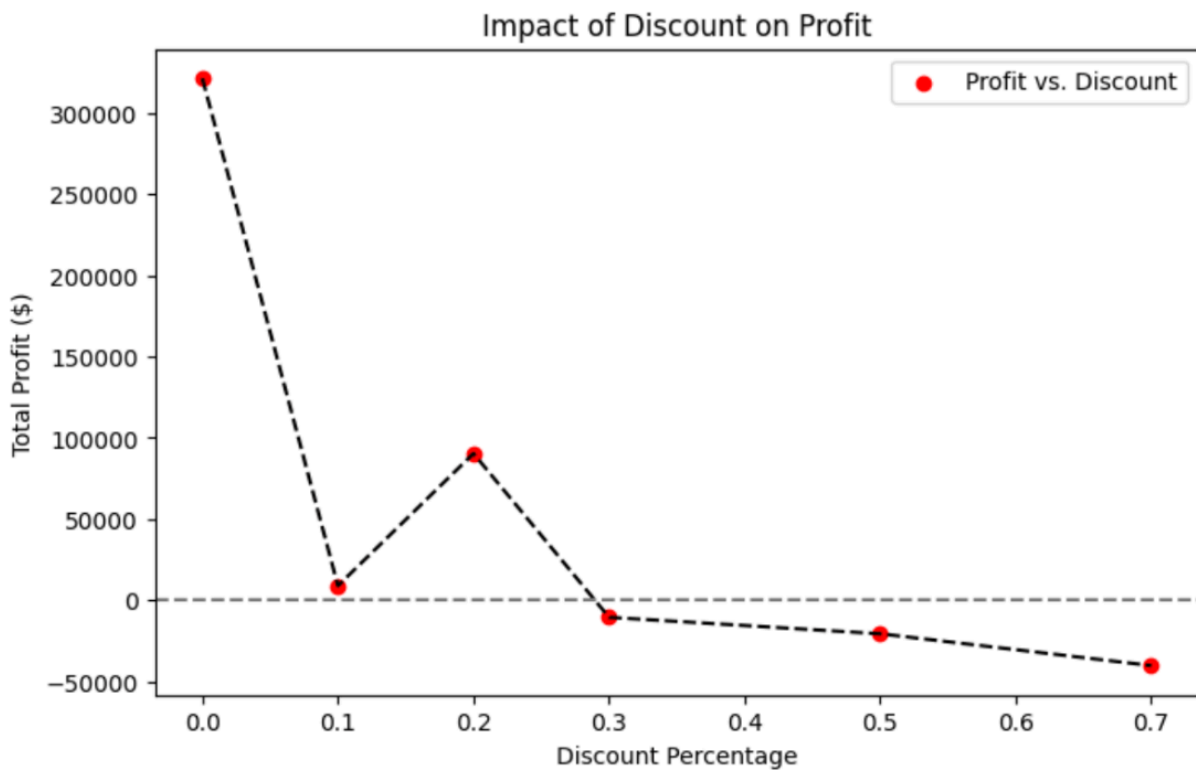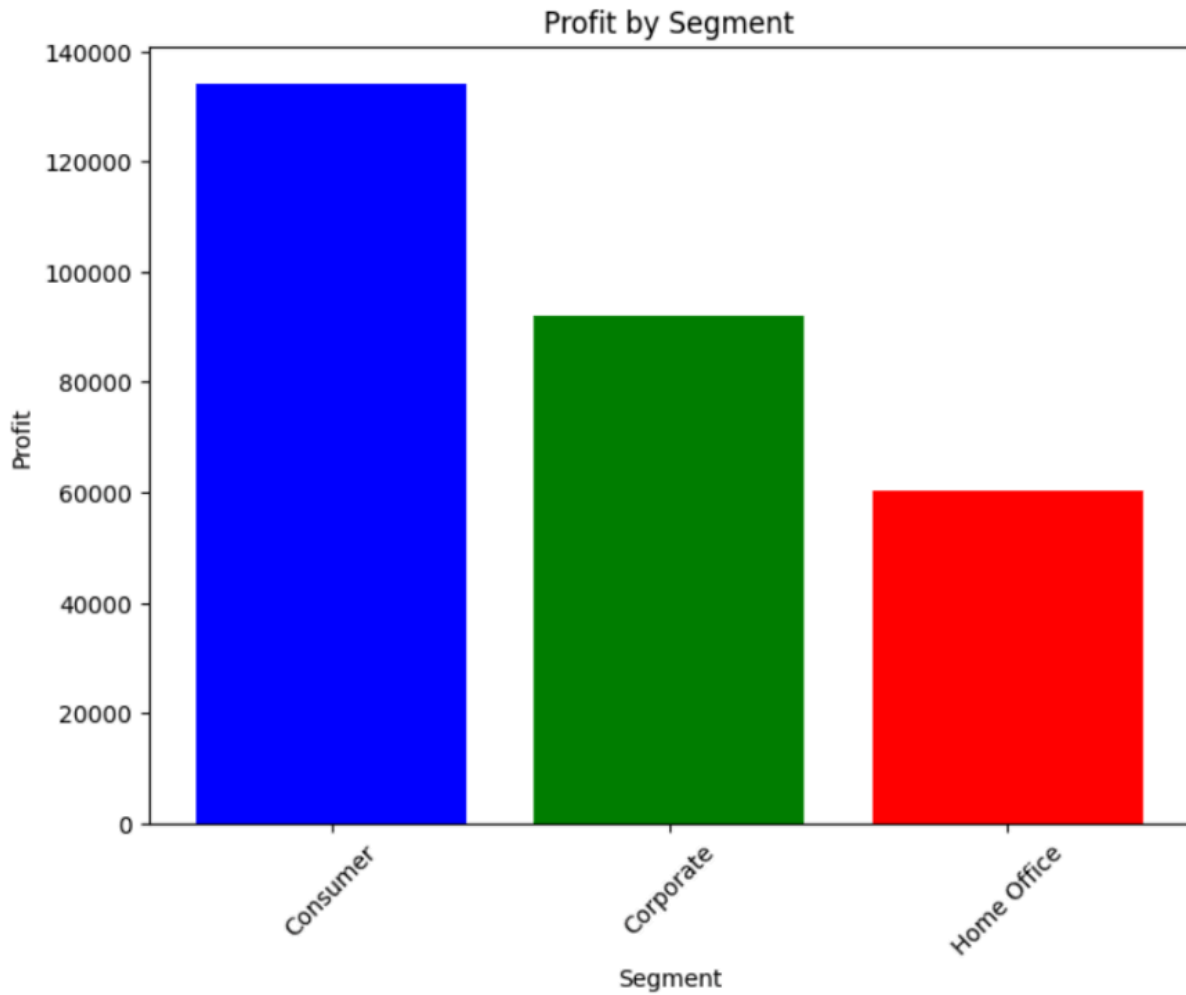
Recommendation:

Based on the analysis and data, we recommend that Natasha reduce discounts and prioritize

high-profit margins by targeting profitable target categories.

Data for Natalie