A CPI Deep Dive
UVA Data Science Case Study

FRED (Federal Reserve Economic Data) has compiled a dataset with the Consumer Price Index (CPI) for urban consumers for every month since 1957. This comprehensive dataset provides a detailed historical perspective on how consumer prices have evolved over more than six decades, reflecting economic shifts, inflation trends, and changes in consumer behavior.

For your case study, imaging that you're an economic analyst, tasked with unraveling the complexities of the Consumer Price Index (CPI). Your journey will lead you through the intricacies of economic data, challenging you to understand how prices impact our lives and the economy.

Prompt:
- o Can you create a 10-year forecast of the CPI for the next decade using the Federal Reserve Economic Data?
- o Use this forecast to analyze the accuracy potential for the next decade.
- o What are the limitations of this prediction?

Deliverables:
- o 2 graphs that show the 10-year forecast of the Consumer Price Index.
    - o One line graph that ranges from the years 1957-2033.
    - o One line graph of the isolated forecast; years 2023-2033.
- o One to two paragraphs about how and the trend of the 10-year CPI forecast may or may not be as accurate as it can be. Include thoughts about any variables that were not taken into consideration as well as potential real-world fluctuations.