Exploring Big Macs
March 2, 2022

The dataset used for this challenge is called 'BigMac.csv' and was taken from this page. The variables are included are below:

- **date:** Recorded date
- **currency_code**: International currency code
- **name:** Country name
- **local_price**: Price in local currency
- **dollar_ex**: US dollar conversion rate
- **dollar_price**: Price in US dollars

Assignment

1. Visualize and describe the distribution of Big Mac prices across all times and all regions in US dollars.

2. What are the countries with the top all time average prices of Big Macs in US dollars? (list the top 10)

3. What are the countries with the highest current price of Big Macs in US dollars? (list the top 10)

4. Which countries have the largest variance in Big Mac prices over time? (list the top 5)

5. Create a line plot showing the prices of Big Macs over time. Different countries should be visualized with different coloured lines. (This plot will be a little bit of a rainbow mess).

6. Create a line plot showing the prices of the top 3 countries with most volatility (change) over time, and the least volatility over time. The six countries should be visualized with different coloured lines. Using the 'plotly' package and the 'ggplotly' function make your plot interactive.

7. After examining the line plots for countries with high volatility in prices are there any trends that occur? Research the steep drops in the price during certain periods.

8. Create a line plot of the average price over all regions of Big Macs over time. Are there any unexpected dips/growths over different periods of times.

9. Which 5 dates have the highest average Big Mac price over all regions?

10. Which 5 dates have the lowest average Big Mac price over all regions?