Steps:

Two parts to the stock assessment tool:

1. Part 1: Statistical Analysis
2. Part 2: Affordability
3. Part 3: Calculating Yield and Recommending top 3 tickers based on historical performance

Assumptions:

* Duration of analysis: 10 years
* Factors being analyzed:
  + Close Prices
  + Price/Equity Ratios, Mo-Lutfor
  + Yield %- Ezii

1. Clean The data. Mohamed
   1. Merging the data
   2. Check for NA
   3. Filtering the data for just the last 10 years (2002-2022)
2. Create Summary tables.: for **Close Price**, **Price/Earning Ratio**, **Yield%** as well as.
   1. Mean
   2. Median
   3. Std. Dev.
   4. Variance
   5. Min, Max
   6. SEM
   7. Moving Average for last 200-days
   8. Cut functions to create labels (labels=[“NYSE,S&P500,”NASDAQ”])
3. Plotting
   1. Plot Mean Open and Close Price for all 10 tickers over the past 10 years.
   2. Box Plot
   3. Scatter plots with regression prices (correlation)
   4. Bar charts (e.g. volume or avg stock close price, comparing between)
   5. Show over time the trend (line pattern over time)