Project 2 Index/Performance Statistics

Part One

Create a market cap-weighted index for the four stocks. Write a brief description of the index. (5) (All stocks must have gone public at least five years ago.)

(You will need to tell me which stocks will be in your index. I will upload a file containing every stock.)

Five points each:

For each stock:

1. Calculate CAGR and average annual return.
2. Calculate monthly standard deviation of returns. Annualize it.
3. Calculate the Sharpe Ratio.
4. Calculate the Sortino Ratio.
5. Calculate the correlation between the two.
6. Calculate the largest peak-to-valley drawdown for each.
7. Calculate the skewness of each.
8. Calculate the beta and alpha of each.
9. Calculate the Treynor Ratio.
10. Calculate the tracking error.
11. Calculate the Information Ratio.
12. Calculate the Appraisal Ratio.

Part Two

Build tool which calculates portfolio statistics.

User inputs weights of the stocks. (5)

Portfolio statistics are displayed. (5)

Build macro which finds portfolios with:

highest Sharpe Ratio,

lowest volatility,

smallest peak-valley drawdown. (15)

Display/visual presentation (10)