Brief Explanation of the Performance Metrics calculated in the spreadsheet:

# Sharpe Ratio:

The Sharpe Ratio is a measure of risk-adjusted return. It assesses the excess return of an investment or portfolio relative to a risk-free investment, taking into account the investment's volatility. A higher Sharpe Ratio indicates better risk-adjusted performance.

## Treynor Measure:

The Treynor Measure, also known as the Treynor Ratio, is another risk-adjusted performance metric. It evaluates an investment's return in relation to its systematic risk, which is typically measured using beta. A higher Treynor Measure suggests a better return for the level of systematic risk taken.

#### Alpha:

Alpha is a measure of an investment's risk-adjusted return compared to a benchmark index. It represents the excess return (positive or negative) an investment achieves above what would be expected given its level of risk. Positive alpha indicates outperformance relative to the benchmark.

# Information Ratio:

The Information Ratio assesses the ability of a portfolio manager to generate excess returns compared to a benchmark index while considering the level of risk taken. It is calculated by dividing the portfolio's excess return by its tracking error (standard deviation of excess returns). A higher Information Ratio indicates a better risk-adjusted performance relative to the benchmark.

### M-Squared (M^2):

M-Squared is a measure used to assess the risk-adjusted return of a portfolio. It takes into account both the portfolio's return and the risk associated with its benchmark index. M-Squared can be particularly useful when evaluating the performance of actively managed portfolios against a benchmark, as it provides a more comprehensive view of risk-adjusted performance than simple returns alone.