**Project I – Portfolio of Stocks Description**

Construct a portfolio of Stocks and Cash (Excel) using the following information:

1. Initial Capital $50,000 (Equity)
2. Obtain a loan (up to 50% Margin) for 7.0% interest per annum.
3. Entry Date (July 31, 2023) – Closing stock for that day.
4. Exit Date (Feb 29, 2023)
5. Maintain Diversification discipline (see below) \*
6. Always maintain at least 10% Cash. Cash interest income at 1.5% per annum.
7. Trading stocks at least 5 times during this period (5 initial stock positions need to be replaced during this period)
8. Assume no trading costs or any additional expenses (except interest on the margin loan)

You Spreadsheet should include the following:

1. Initial Transaction Sources and Uses (July 31, 2023)
2. List of stocks (Symbols)
3. Business Description (one line) and Industry categorization for each stock
4. Monthly Cash Flow for Aug 2023, Sep 2023, Oct 2023, Nov 2023, Dec 2023, Jan 24 and Feb 2024 which will include any dividends paid, gains and losses on trades, interest payments, interest income of cash balance.
5. Overall monthly performance (including a graph)
6. S&P 500 Index on the closing of Jul 31, Aug 31, Sep 29, Oct 31, Nov 30, Dec 29, Jan 31, 2024 and Feb 29, 2024.

At Value Date calculate the following:

1. Total Portfolio total HPR – both Levered and Unlevered
2. Total Portfolio Standard Deviation of average monthly returns.
3. Portfolio performance as compared (including a graph) to S&P500 index during this period – (Beta Coefficient calculation (manual), Regression Analysis and ANOVA, Correlation between portfolio and S&P500).
4. Sharpe Ratio of both of your portfolio and the S&P Index.
5. CAPM and Jensen’s Alpha

*Suggested website to use:* [*http://finance.yahoo.com*](http://finance.yahoo.com)

\*Diversification Discipline:

* + No less than 10 stocks in the portfolio at all times
  + Each stock value cannot represent more than 20% of the total portfolio.
  + Each industry value cannot represent more than 25% of the total portfolio
  + Across 8 different industry sectors and one of the industry sectors should have at least 2 companies.